UNIVERSITY OF
STIRLING

FACTORS AFFECTING STORE BRAND PURCHASE IN THE GREEK GROCERY MARKET

Submitted by:
Paraskevi Sarantidis
Department of Marketing

Submitted in Fulfillment of the Degree of Doctor of Philosophy

August 2012

ABSTRACT

This study is an in-depth investigation of the factors that affect store brand purchases. It aims to help both retailers and manufacturers predict store brand purchases through an improved understanding of the effects of three latent variables: customer satisfaction and loyalty with the store; which is expressed through word-of-mouth; and trust in store brands. An additional aim is to explore variations in the level of store brand adoption and the inter-relationships between the selected constructs.

Data was collected through a telephone survey of those responsible for household grocery shopping, and who shop at the nine leading grocery retailers in Greece. A total of 904 respondents completed the questionnaire based upon a quota of 100 respondents for each of the nine retailers. Data were analyzed through chi-square, analysis of variance and partial least square. The proposed model was tested by partial least square path modeling, which related the latent variables to the dependent manifest variable: store brand purchases.

The findings provide empirical support that store brand purchases are positively influenced by the consumers' perceived level of trust in store brands. The consumer decision-making process for store brands is complex and establishing customer satisfaction and loyalty with the store does not appear to influence store brand purchases or the level of trust in the retailer's store brands in the specific context under study. Consequently the most appropriate way to

influence store brand purchases in the Greek market is through increasing in the level of trust in the retailer's store brands. It is suggested that retailers should therefore invest in trust building strategies for their own store brands and try to capitalize on their brand equity by using a family brand policy. Theoretical and managerial implications of the findings are discussed and opportunities for further research are suggested.

To my mother Stratoula

To my sister Alexandra

In memory of my father Polychronis

Στην μητέρα μου Στρατούλα

Στην αδελφή μου Αλεξάνδρα

Στην μνήμη του πατέρα μου Πολυχρόνη

ACKNOWLEDGMENTS

I would like to take the opportunity to express my gratitude to the people that have helped me throughout the PhD process, as I juggled teaching, administrative duties and my dissertation. First and foremost, I would like to express my sincere gratitude to my supervisor, Prof. Steve Burt, for his continuous support, understanding and motivation. He gave me the appropriate guidance and support while at the same time he offered me the flexibility to pursue my research ideas. My thanks also to Sharon Deery for helping me with all the administrative issues and making my stay comfortable at Stirling.

I also wish to thank The American College of Greece for encouraging its teaching staff to pursue academic growth and for offering their financial support. Also, many thank to the librarians of The American College of Greece and of Stirling University for their assistance throughout my research and the IRM of The American College of Greece for their support.

I would like to thank my friend, Dr Cleopatra Veloutsou, for the stimulating discussions and for her valuable tips through the course of the process. My sincere thanks to the Global Link, S.A. and specifically to Mr. Sigalos for the assistance in data collection. Also many thanks to Dr Sotiris Panagopoulos and Mr Rafael Soustiel for their suggestions in the statistical analysis.

To all my friends, thank you for your understanding, moral support and encouragement in my moments of crisis.

I would also like to thank my family for their love and support throughout my life. Without them I wouldn't be the same person. Thank you for giving me strength to go after my dreams. Thank you for believing in me.

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

1.0 Preface

In this introductory chapter, an overview of the main areas of this research study will be presented. The first section provides an introduction to the field of study. The second section outlines the justification for the study. The next section presents the purpose and objectives of the study along with the major research questions that are to be investigated. The proposed methodology used for data collection and analyses are described in section four and the final section outlines the structure of the thesis.

1.1 Introduction to the Field

It is widely accepted that the retail environment is highly competitive. Retailers are competing for customers, suppliers, locations, services, and merchandise with other traditional store-based retailers, as well as internet and catalog retailers. In order to respond to these competitive challenges, retailers are trying to gain differential advantage (Homburg, Hoyer et al. 2002; Burt and Mavrommatis 2006). Towards the achievement of this objective, retailers have recognized that brands constitute essential resources for generating and sustaining a competitive advantage. Therefore, building a strong retail brand has

become a major challenge in retailing and an issue of major importance for all retailers (Aaker 1989; Burt and Sparks 2002; Kent 2003; Grewal, Levy et al. 2004).

In the development of their retail brand name and in the battle for image retailers have some advantage over manufacturers. Consumers interact directly with retailers, often on a daily basis. Consequently image develops from these direct experiences of the retailer as a service brand. A retailer can use tangible elements such as its store design, location, and personnel to develop a favorable image for their store. The cost of branding and developing an image for the retailer, as a service brand, is lower than that for manufacturers (Davies 1998). A major challenge for retailers and a driving force for developing a strong brand is the development of store loyalty. Loyalty is related to customer satisfaction (Bloemer and de Ruyter 1998). Store Brands offer a unique opportunity to retailers to build their brand equity and increase store differentiation and consumer loyalty to their stores (Corstjens and Lal 2000; Ailawadi and Keller 2004).

The introduction and growth of store brands (SBs) is an issue of substantial interest to retailing and manufacturing managers and to marketing academics. The growth and importance of SBs is undeniable in both the U.S and the European market. According to a global online survey conducted by A.C Nielsen, during 2010 SBs accounted for 17.4 percent value share in the United States bringing approximately $90 billion of revenue to the U.S retail business (Nielsen 2011). As far as Europe is concerned, the same study revealed that

SBs have achieved at least a 25% share of sales in 10 countries and their market share increased in 13 out of the 19 countries in Europe. Overall, Europe is considered the most developed SB region with the countries of Switzerland, United Kingdom and Germany reporting the highest SB market share (46%, 43% and 32% respectively) in Europe and worldwide (Nielsen 2011).

Given their strategic importance, SBs have attracted the interest of the academic community and there are numerous studies addressing a wide variety of issues. Existing research has revealed differences in the growth rate and the level of adoption of SBs: (1) across countries (Quelch and Harding 1996; Erdem, Ying et al. 2004; Veloutsou, Gioulistanis et al. 2004), (2) across product categories (Hoch and Banerji 1993; Halstead and Ward 1995; Ainslie and Rossi 1998; Batra and Sinha 2000; Cotterill, Putsis Jr et al. 2000; Miquel, Caplliure et al. 2002), and (3) across retailers (Dhar and Hoch 1997). Researchers have tried to identify the reasons for these differences in growth. Much of this work focuses on understanding the characteristics of the different markets under study, the characteristics of consumers of SB products, the perceptions held towards SBs, the penetration of SBs among different product categories, and the way SBs are managed. Overall, it appears that empirical studies examining the role of the retailer and retail strategy towards store brand product ranges are underrepresented.

1.2 Justification for the Study

Despite the fact that many researchers recognize the value of branding in retailing and the plethora of studies on SBs, there are still issues to be addressed. Significantly less research has been devoted in the effect of the retailer's strategy on SB sales. There are few research studies in the specialized literature that try to analyze the relationship(s) between the retailer's strategy, the retailer's SB management practices and the acceptance of the retailer's SB products. Specifically, little, if any work, is presented concerning prediction of SB purchases as a result of customer satisfaction with the retailer, the loyalty towards the retailer, and the level of trust in SBs.

One observation after reviewing the published research is that most researchers have treated SBs as a product category. They do not consider the SBs of each retailer as a separate brand, each one having its own unique characteristics and attracting its own consumer attitudes and perceptions. When consumers have difficulties evaluating a SB or a manufacturer brand per se, their perception of the company's ability to produce or to be responsible for the production of that product might influence their interest in the brand in question (Brown and Dacin 1997). The research will address this gap by assessing the SBs separately for a number of retail organizations.

In the same vein, Richardson et al. (1994) and Richardson et al. (1996) found that consumers perceive SBs to be of poor quality, and when assessing product quality consumers rely on attributes such as price, brand name and packaging. Additionally, Richardson et al. (1996) found that attractive store

aesthetics have a positive effect on consumer ratings of SBs but have no influence over their judgment of NB (National Brand) quality. Thus, suggesting a link between SB performance and the strength of the retailer's image. From this one might assume that consumers may be using the retailer's brand name and their level of satisfaction with the retailer as a cue when judging SB quality. The research will explore how customer satisfaction with the retailer affects the consumer decision-making process.

Trust is widely accepted as an important variable that affects human relationships at all levels and has received a great deal of attention in the social sciences literature (Doney and Cannon 1997; Singh and Sirdeshmukh 2000) and particularly in the marketing literature (Morgan and Hunt 1994; Ambler 1997; Chaudhuri and Holbrook 2001). Customer satisfaction with a brand has been identified as an important determinant of trust in a brand. But, to the best of the researchers knowledge, there are no research studies that link customer satisfaction with the store to the trust in the SBs of the store. Furthermore, since trust is viewed as an attitude, it is posited that the level of trust in SBs influences SB purchases. This research will explore the above-mentioned relationships.

1.3 Research Aims and Objectives

The overall aim of this study is to investigate the factors that affect SB purchases in individual grocery retailers. In order to examine across-retailer variations in

the level of SB adoption and penetration, a number of different retailers will be examined and several specific relationships will be investigated, namely:

- the inter-relationships, as well as the directionality of the relationship, between customer satisfaction and consumer trust in SBs and SB purchases. the association between the level of customer satisfaction and the variety of different SB product categories that customers purchase.
- the relationships between the intention to recommend the store to others (WOM) and customer satisfaction and SB purchases.
- the relationship between trust in SBs and SB purchases.

1.4 Research Methodology

Given the explanatory nature of the study, it was decided to utilize quantitative research methods. An empirical study was conducted to extend the existing SB literature with respect to the concepts of customer satisfaction and loyalty with the store, and the level of trust in SBs.

The researcher selected the food retailing industry and specifically super markets in the two largest cities in Greece as the appropriate setting for this study for a number of reasons. First, supermarkets are identified as an important component of the food retail industry and an important channel for SBs (Bell, Davies et al. 1997; Goldman, Ramaswami et al. 2002; Deloitte 2010). Second, due to the importance of the fmcg category and SBs within these categories, it was intended to build upon the already rich literature in the grocery area. Third,

the nature of the market in Greece and the absence of specific studies in that area made it an attractive setting for evaluation and study. Finally, the extensive experience of the researcher in the Greek fmcg industry and access to the Greek market were important determinants in the selection.

The study was formally proposed in 2006 and after reviewing the relevant literature, research hypotheses were developed for empirical testing. A model of trust in SBs, with multiple customer satisfaction determinants integrating the satisfaction and trust literature was developed and empirically tested. The test of the proposed model was based on a simple path model that related the latent variables to the dependent manifest variable “SB purchase”.

The data collection was conducted in the two major cities of Greece (Athens and Salonica), in late 2007. Therefore, the data were collected well before the current crisis in the Greek economy. From the fieldwork, data was collected for each of the nine retailers that sell SBs. Overall, 904 usable questionnaires were collected for analysis.

The data was processed using SPSS version 17.0 and SmartPLS. To test the research hypotheses, chi-square was employed for independence, and analysis of variance, one-way ANOVA, and Friedman two-way analysis of variance (ANOVA) were operationalized. Additionally, for multivariate analysis, Partial Least Square modeling was employed with 22 formative indicators measuring the three latent variables. These analyses provided a complete exploration of univariate, bivariate, as well as multivariate relationships among the data.

1.5 Structure of the Thesis

The study is structured into six chapters including the introductory chapter. Figure 1.1 below provides in a visual form an overview of how these chapters are structured. The current chapter introduces the study and leads us into the focus and the justification of the research problem. The chapter focuses upon giving the reader a brief overview of the foundations for the study.

The second chapter provides a review of the emergence of retail branding, the introduction and growth of SBs, as well as the role of SBs for retailers. When exploring this literature the focus was on identifying the factors influencing their growth and the reasons for differences in the rate of adoption and penetration across different countries, product categories and retailers.

Chapter 3 provides a more focused review of the SB literature and seeks to identify research gaps that provide the rationale for this study. From this the conceptual framework that is to be tested against empirical data is introduced and hypotheses are presented. A literature review for each of the three constructs that are included in the conceptual framework, namely customer satisfaction, brand trust, loyalty and word-of-mouth is provided to expand upon the key determinants within each of these constructs. Finally, for each of these constructs, definitions and measurements to be used in this study are provided.

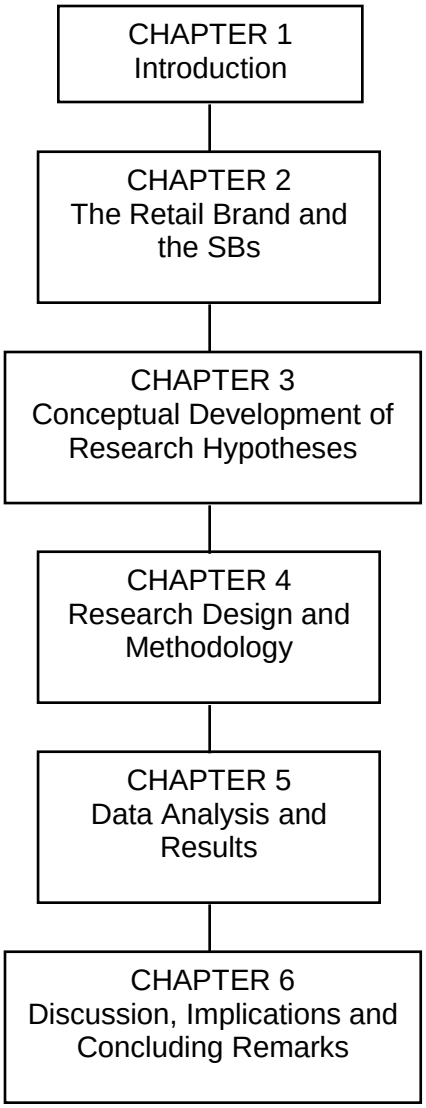
Chapter 4 presents in detail the research design and analytical methodologies that will be utilized to test the conceptual model. This includes the philosophical standpoint taken by the researcher, the choice of research

approach and methods of data collection, the design of the data collection instrument, sampling and survey procedures, and the procedures for analyzing the data. The final section discusses the choice of statistical techniques and the statistical software to be employed in the data analysis. Furthermore, the factors influencing the selection of the statistical techniques are presented. Detailed procedures for the assessment of the measurement and the structural model are also provided.

Chapter 5 scrutinizes the findings of the study and tests each of the hypotheses. It opens with the demographic profile of the respondents in the total sample and for each of the nine grocery retailers selected. The results for the measurement and structural model, following the guidelines that were described in chapter four are presented, the predictive power of the model is assessed, and the outcome of the hypotheses testing is presented.

Finally, chapter 6 presents the conclusions and the theoretical implications of the findings. Suggestions for practitioners, as well as avenues for future research are proposed.

Figure 1.1: Presentation Flow of the Thesis



CHAPTER 2: THE RETAIL BRAND AND THE STORE BRANDS

2.0 Introduction

The first step in every research project is to investigate existing research related with the topic under study. An integrative type of literature review as opposed to the more focused theoretical and methodological review is used in this thesis.

The chapter is divided into three sections. The first section discusses issues about branding such as the different categories of brands, as well as the value of brands to all parties involved. The next section presents an overview of branding at the retail level, the growth of the retailer as a brand and the concept of "retail brand" image.

The last section reviews the literature related to store brands (SBs), in order to be familiar with previous studies on the topic and to develop the necessary theoretical background for this research. The researcher reviews the existing models for SB, briefly describes the evolution of SB, the driving forces for SB growth, as well as the differences in the rate of SB adoption.

2.1 Defining a Brand

Brands have been around for centuries and unquestionably they represent a way to distinguish the goods or services of one company from those of another. The

original motivation for branding was for craftsmen and others to distinguish their products so that customers could easily recognize them. Branding, or at least trademarks, can be traced back to ancient pottery. The word “brand” is derived from the Old Norse word “brandr”, which means, “to burn”. In order to identify their animals, the owners of livestock marked them in this way. For the same reason companies are marking, or branding, their products (Keller 1998).

A review of the literature provides us with a plethora of definitions of the term “brand”. De Chernatony and McWilliam (1989) attempted to reveal the way brands have been interpreted. They identified five categories of brands: as devices of ownership; as differentiating devices; as a means of communicating a guarantee; as a way to expedite the consumers’ decision making; and as symbolic devices to provide consumers with a way to express themselves. Furthermore, De Chernatony and Riley (1998) provide a range of definitions used by the trade as well as by scholars. They identified definitions of the term “brand” emphasizing twelve different aspects, such as: a legal instrument; a logo; a company; a shorthand; a risk reducer; an identity system; an image in consumer’s mind; a value system; a personality; a relationship; a value adding device; and an evolving entity. Wood (2000), in her effort to summarize the plethora of definitions, grouped them into those with an emphasis on brand benefits to the company and those with an emphasis on brand benefits to the consumer.

According to the American Marketing Association, a brand is *“a name, term, sign, symbol, or design, or a combination of them intended to identify the*

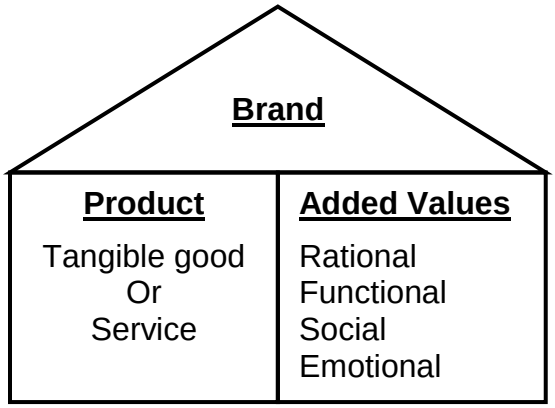
goods and services of one seller or group of sellers and to differentiate them from those of competitors". This definition has been criticized for being too product-oriented and for not including intangibles elements, such as image, nor recognizing elements of identification and differentiation. An alternative definition that includes these elements is: *"a brand is a name, term, design, symbol or any other feature that identifies one seller's good or service as distinct from those of other sellers"* (Bennet 1995; Wood 2000).

The famous advertising copywriter and ad agency founder David Ogilvy defined a brand as *"the intangible sum of a product's attributes: its name, packaging, and price, its history, its reputation and the way it's advertised"*. Walter Landor, another advertising expert and a pioneer of branding, said, *"simply put, a brand is a promise. By identifying and authenticating a product or service it delivers a pledge of satisfaction and quality"*. Additionally, he said, *"Products are made in the factory, but brands are created in the mind"*. Similarly, David Aaker, in his book "Building Strong Brands", suggests that the brand is a "*mental box*" (Aaker 1996).

A brand is therefore much more than a product or service. A brand is intangible and exists in the consumer's mind. A brand provides added values (de Chernatony 1997; Webster 2000). Even in cases where the product category has become a commodity, product offerings can still be branded by adding values to them (Jacques 2007). Some of the most commonly mentioned added values in the literature are rational, functional, social and/or emotional values. The types of values that are used as components of brands depend upon the

consumer, the industry and the situation (Sheth, Newman et al. 1991; Solomon and Buchanan 1991; de Chernatony 1993). Figure 2.1 below illustrates the components of a brand.

Figure 2.1: Brand Components



Source: Author

In view of the above definitions, all tangible goods and services can be branded. Retailers are in the service industry so it follows that retailers can also be brands in their own right. Retailers as part of the channel of distribution may be selling tangible goods (food, clothing, furniture), provide services (restaurants, banks) and/or services that support physical products (automobile dealers, gas stations). In order for retailers to develop their store as a brand, they should aim to enhance their role from simply trading tangible goods and/or services to offering added values to their customers (see figure 2.1).

Within this thesis, the term “Retail Brands” will be used to describe retailers that are branding their stores and the term “Product Brands” to describe manufacturers of tangible goods or services that are branding their products.

2.2 Categories of Brands

The previous section revealed a plethora of definitions and interpretations of the term “Brand”. Academics agree that there are different categories of brands but there is no agreement upon the number of existing brand categories, the terminology used, and the way they are defined. Schutte (1969) claims that the reason for this is that these terms were created to satisfy the need for an isolated communication process. So, they are too narrow to describe other marketing processes, to accommodate the needs of different industries, and changes in the market. Overall, the ownership and control of the brand, along with its strategy, determine the category of brand.

Some academics have identified three categories of brands: manufacturer, generic and private distributor (Bellizzi, Krueckeberg et al. 1981; Cunningham, Hardy et al. 1982; de Chernatony 1989b). Others argue that there are only two categories of brands: manufacturer and private label. They claim that generic brands were the predecessors of private label or that generics are just a variation of private label brands (McGoldrick 1984; Simmons and Meredith 1984; Laaksonen and Reynolds 1994; Wileman and Jary 1998). The aim in this section is to briefly describe these categories of brands, and in the last sections of this chapter to provide a more detailed review of the private label or private distributor brands.

2.2.1 Manufacturer Brands

Manufacturer brands (MBs) are brands initiated by producers and ensure that producers are identified with their products at the point of purchase. Some common definitions of manufacturers' brands are:

- *"brands owned by manufacturers and marketed to wholesalers and retailers within the channel of distribution"* (Pride and Ferrell 2003).
- *"products sold under a manufacturer's name or trademark which are not exclusively sold or supplied to any single organization" (Schutte 1969; Morris 1979)*.

A review of the literature has revealed a large variety of terms that are used to describe this category. Academics, marketers and the trade have not come to an agreement upon a commonly accepted term. Schutte (1969) has provided the following list of terms:

Table 2.1: Terms used for Manufacturer - oriented Brands

Manufacturer brand	Well-known brand	Packer's label
National brand	Pre-sold brand	Regional brand
Advertised brand	Controlled label	Processor brand

Source: Schutte (1969)

In this thesis, we will use the term manufacturer brands (MBs). Manufacturers make significant investments for the development and support of these brands. They have invested heavily in areas such as: consumer research, R&D, production, packaging, and communication. Therefore, they brand their products to protect their investment. MBs have dominated the consumer goods industry for most of this century.

2.2.2 Generic Brands

Generic brands are considered the most significant innovation in the retail industry (Bellizzi, Krueckeberg et al. 1981). The generic concept is based on the no brand personality or identity concept (Fitzell 2003). Generics are products that indicate only the product category (for example toilet paper, paper napkins, etc.). Generic brands treat products like commodities. They are also called, no-names, un-branded products, no frills and value lines (Zbytnieweske and Heller 1979; Prendergast and Marr 1997). They were first introduced in France on April 1st 1976 by the French supermarket chain Carrefour as "*Produits Libres*" which literally means "brand free". They became quite successful in France. Driven by their success in France, Jewel Food Stores, a Chicago based food retailer, introduced generic grocery products to the U.S market in February 1977 and by 1979, generics were being sold by over 100 food distributors in over 10,000 supermarkets across U.S. (Burck 1979; Yao 1979).

Generic brands used a marketing strategy of a very low price (30 to 40 percent lower than the leading MB, and 10 to 20 percent lower than private distributor brands); simple product functionality; very simple packaging, typically a plain "white label" that indicated only the product category and the composition inside the pack; the label did not include the company name or any other identifying terms; and they were distributed through major supermarket chains (Dick, Jain et al. 1996; Prendergast and Marr 1997).

Generics were popular in the late 1970s and early 1980s when they reached maturity (Harris and Strang 1985). In 1984, total retail sales of generics

in the U.S exceeded $2.5 billion having spread to over 320 product categories and having captured significant market shares in many product categories (Harris and Strang 1985; Wilkes and Valencia 1985). In 1982, generics reached their highest share in the U.S with 2.5 percent of total grocery sales. Their sales then started to decline, and by 1985 they had dropped to 2.0 percent of total grocery sales. Their rapid growth and expansion has now ended; today they account for less than one percent of total grocery sales. As generic brands faded, private distributor brands were introduced. Many academics claim that the introduction of generics was the first step in the development and evolution of private distributor brands (Simmons and Meredith 1984; Laaksonen and Reynolds 1994; Prendergast and Marr 1997). De Chernatony (1989b) suggests that generics are not a different category of brand but rather another version of private distributor brands and that in the U.K consumers place generics and private distributor brands in the same category. He claims that the reason for this is because in the U.K, “true” generics were not actually introduced, the low price generic brand was always associated with a particular retailer (de Chernatony 1989a).

2.2.3 Private Distributor or Store Brands

Private distributor brands also called dealer brands, private brands, or store brands are brands that are initiated and owned by resellers (Richardson, Jain et al. 1996b; Batra and Sinha 2000). Marketers, after all these years, still cannot agree what to call branded products that are not owned by manufacturers. Table 2.2 provides some of the different terms and definitions that have been used in

the literature. Many of these terms are used interchangeably even though they are not synonymous. We can group them into those that use the word "label" and those that use the word "brand" as part of the term. In this thesis, we will use the term store brands (SB). It is the researcher's opinion that the term SB embraces all the different types and different stages of SB development.

Table 2.2: Summary of terms used for Store Brands

Terms	Used by:
Store brands	Cunningham *et al*. 1982; Richardson *et al.* 1994; Raju *et al.* 1995; Dick *et al.* 1996; Baltas 1997; Dhar and Hoch 1997; Corstjens and Lal 2000; Ailawadi *et al*. 2001; Sayman *et al.* 2002; Erdem *et al.* 2004; De wulf *et al*. 2005; Mieres *et al.* 2006; Oubina *et al.* 2006
Retail brands	Davies 1998; Burt 2000
Own brands	Morris 1979; Balabanis and Craven 1997
Distributors' brands	Schutte 1969
Private label brands	Bellizzi *et al*. 1981; Nandam and Dickinson 1994; Halstead and Ward 1995; Hoch 1996; Ashley 1998; Batra and Sinha 2000; Vaidyanathan and Aggarwalm 2000
Private label products	Salomon and Cmar 1987; Quelch and Harding 1996; Dunne and Narasimhan 1999; Cotterill *et al.* 2000
Own labels	Livesey and Lennon 1978; Simmons and Meredith 1984; Uncles and Ellis 1989; Buck 1993; Omar 1994; Veloutsou *et al.* 2004

Defining SBs and agreeing upon an acceptable definition has proved to be an even more difficult and contradictory task for both marketing academics and managers. Some of the earliest definitions that are often cited are:

- *by the Economist Intelligence Unit (EIU): "…consumer products produced by, or on behalf of, distributors and sold under the distributor's own name or trademark through the distributor's own outlet" (Morris 1979).*

- *by Rousell and White: "…Products sold under a retail organization's house brand name, which are sold exclusively through that retail organization's outlets" (Morris 1979).*

The problem is that these definitions do not capture the idea of SB as they appear in the market today. For instance, retailers do not use only their organization's name for their SB; instead they may use different names to differentiate their SB ranges.

- *by A.C. Nielsen: "…a brand name owned by the retailer or a wholesaler for a line or variety of items under exclusive or controlled distribution" (McGoldrick 2002).*

We believe that the above definition can accommodate the variety observed in a retailer's SB strategy. For instance, the brand name can be the retailer's own name or a name created exclusively by the retailer. Regardless of what we decide to call them or how we define them, the importance of SB in the retail industry has been clearly established over the past decade. We shall return to a more thorough discussion of SB at the end of this chapter and in chapter three.

Overall academics have found that consumers of MBs, SBs, and generic brands are different in their demographic profile and in the criteria they use to make their purchase decision. Although research findings are at times contradictory, there are a number of brand perceptions arising from previous studies. MB users are more concerned with quality while generic brand users with price (Cunningham, Hardy et al. 1982). Additionally, consumers are different in their perceptions towards price and quality. MB are perceived to be superior in quality and more expensive than the other two categories; generic brands are perceived to be a low quality, low price alternative; SBs are perceived to be in the middle between MB and generic brands in terms of price and quality

but they are perceived as a better value alternative than MB and generic brands (Bellizzi, Krueckeberg et al. 1981; Omar 1994). Furthermore, consumers are different in their perceptions towards performance and financial risk. Generic brands are perceived to have the highest performance risk and the lowest financial risk while MB were perceived to be the alternative with the lower performance risk and the highest financial risk (Dunn, Murphy et al. 1986). Finally, consumers are different in their shopping behavior. Specifically, those consumers in favor of MB are more influenced by advertising and more loyal to brands than generic or SB buyers (Bellizzi, Krueckeberg et al. 1981).

2.3 The Value of the Brand

Brands, as we define them in section 2.1, provide numerous benefits to the consumer or user, to the brand owner, to the distributor (retailer and wholesaler) and to the economy and society as a whole. Although the value of branding is not in doubt, we have to note that some companies do not brand their products. The main reason for this is that they are unable, or unwilling, to assume the responsibility, or cost of promoting the brand and of maintaining consistent product quality.

In the following paragraphs, we will present the value of the brand to each of the above-mentioned stakeholders. Of course, the more successful the brand is, the greater its value (Doyle 1989).

2.3.1 Value to Consumers

Overall the most important benefit of branding to the consumer is that brands simplify the decision making process (Jacoby, Szybillo et al. 1977). In a world where time and convenience are highly regarded, this is a very important benefit. A review of the literature (Corstjens and Corstjens 1995; deChernatony and McWilliam 1989; Jacoby *et al.* 1974; Keller 1998; Kotler and Keller 2006; Roselius 1971; Salzer-Morling and Strannegard 2004; and Webster 2000) has revealed the following key values to be of most importance to consumers:

- Identification of the product's source. Consumers can identify the maker of the product and hold him responsible;
- Risk reduction. Brands can serve as perceived risk reduction devices. During the process of buying and consuming a product, consumers have to deal with different types of risks (functional, physical, financial, social, psychological, time). Brands are one way that consumers try to handle these risks;
- Search cost reduction. Consumers through trial and error learn and evaluate brands. So, when the need for a repurchase arises, they do not need to search again. Additionally, brands help consumers compare prices across stores and to be absolutely sure that he/she is comparing apples with apples;
- Signal of quality. The brand name is one of the attributes consumers use as a surrogate indicator of quality. So, brands have a major impact on consumer product rating (blind vs. branded product testing confirms this);

- Symbolic device. Consumption is not strictly utilitarian. It also helps consumers develop and communicate their own identity. So, brands through their images and associations help consumers to express themselves.

2.3.2 Value to Brand Owners

Typically in the literature academics and marketers use the term manufacturer to describe the owner of the brand. Within this thesis, we will use the term "Brand Owner" since it is more inclusive and can cover situations such as: when the owner is the manufacturer of a tangible good, when the owner is "the manufacturer" of a service, when the retailer is a brand in itself (section 2.1) and when the retailer is the owner of a SB (section 2.2.3).

Our literature review reveals several values pertinent to brand owners (de Chernatony and McWilliam 1989; Doyle 1989; Agres and Dubitsky 1996; Arnold 2000; Webster 2000; Aaker 2003; Dawar 2004; Kotler and Keller 2006). So, a brand:

- Assists in product handling and tracing, in organizing and monitoring inventory and accounting records;
- Offers legal protection. A brand name can be protected through registered trademarks;
- Offers control over the channel of distribution. Channel members have a greater interest in cooperating with a strong brand. They are more likely to cooperate to the rules of the company that represents them since they do not want to loose the opportunity to sell a strong brand. Strong brands have

more power to monitor and supervise their channels members in the way they implement the marketing strategy for their brands;

- Builds a corporate image. Developing powerful brands facilitates the building of a corporate image;
- Provides differentiation. Brand owners in their effort to differentiate their products “name” them. They use brands in order to identify and distinguish their product offerings (tangible goods and or services) from the others. Their primary concern is to guarantee the quality levels for their brands and to differentiate their brand from the competitors. The aggressive competitive environment has made it very difficult for a brand to develop and maintain differentiation. However, if the owner succeeds in differentiating his brand in a way that is difficult to be copied by competitors, then the brand has gained a competitive advantage;
- Reduces the cost of new product introduction. Brands provide an opportunity to develop relationships of trust with the consumers. Marketers can use these relationships, and leverage their brands by introducing new products under an existing brand name. So, they can achieve faster trial and higher adoption rates for the new product. More than half of the new products introduced during the 1980s were extensions of existing brands (Pitta and Katsanis 1995). A more recent estimate by Kotler and Keller (2006) is that approximately 80 to 90 percent of new products introduced in a year are line extensions. Some examples of successful brand leverage are Diet Pepsi,

Diet Coke, Microsoft Xbox video game system and Apple iPod digital music player.

2.3.3 Value to Distributors

Traditionally brands provide several benefits to retailers, wholesalers and to any other type of intermediary in the channel of distribution (de Chernatony and McWilliam 1989; Kotler and Keller 2006, pp.275; Webster 2000). For example, they:

- Improve the image of the store and help the distributor to establish a specific market position;
- Generate traffic and improve store loyalty. As a result of an improved image, they attract more customers into the store. Additionally, brand owners build their brands and through their pull strategies try to develop a preference for the brand and for those who distribute them;
- Lower risk and uncertainty and allow faster inventory turnover. For a successful brand, there is an established demand pattern. So, estimating sales and placing orders might be easier. Additionally, the distributor has the owner's commitment to promote the brand;
- Higher margins. Brands, especially successful brands, provide added value and as such they can support higher prices. Selling costs are expected to be lower because the distributor gets the marketing expertise and support of the brand's owner. So, we have higher margins for the distributor.

2.3.4 Value to Economy and Society

Branding is the creation and the cornerstone of capitalism. So, we cannot underestimate the role of brands to the economy and to society. For example, they:

- Add Economic Value. Brands stimulate demand and drive the market forward;
- Stimulate Innovation. Brands in order to survive have to develop and maintain differentiation. They can achieve this through continuous innovation (Aaker 2003);
- Increase Exports and Employment. Brands and especially global brands are a very strong asset to the economy of their home country. They increase exports and support a country's trade surplus.

A study conducted by Westminster Business School into the value of branding to the UK was published in December 2008. It is estimated in this study that 4% of those employed in the UK are employed in the creation and management of brands. Furthermore, brands as an intangible investment are an important element of the knowledge economy; it is estimated that in 2006, 6% of total tangible and intangible investment in the UK economy was invested in brands (www.britishbrandsgroup.org.uk).

In the previous sections, we presented some of the definitions and interpretations of the term "Brand", provided a brief description of the different categories of brands, and illustrated the importance of brands to various stakeholders. In the following sections, we will illustrate how retailers try to apply

the marketing concept, how they develop their retail strategy at both the corporate and store level, and how they measure the outcomes of their efforts. We will start this review by attempting to identify the key differences between the "Retail Brand" and the "Product Brand", and the key drivers for retail brand growth.

2.4 The "Retail Brand" concept

We have indicated, in section 2.1, that retailers can also be brands. In this section, we will try to identify and briefly describe differences between a "retail brand" and a "product brand", the factors that drive "retail brand" growth as well as identifying some important considerations in "retail brand" development.

2.4.1 The "Retail Brand" vs. the "Product Brand"

It is important to identify the key differences between "retail brand" and "product brand" as well as to understand their implications to strategic marketing planning and implementation. We can identify these differences in terms of location, in segmentation, in brand attributes, in communicating with consumers, in positioning, in the rate and diversity of change, in internal communication and in organizational structure. In the following paragraphs, we will briefly describe these differences.

- In Location. Manufacturers need to make their brands available to consumers through the selection of appropriate intermediaries. Especially in the fmcg

category the importance of distribution is undeniable. Manufacturers must develop marketing plans for both the consumer and the customer. They have to decide upon what is the best channel, develop relationships with them and through their push strategies persuade intermediaries to carry, promote, and sell their product brands to the end users. Retailers on the other hand are the manufacturers' customers, and are part of the channel of distribution that manufacturers are using. Academics agreed that location represents possibly the single most important element of the retailer's strategy (Clarke and Rowley 1995; McGoldrick 2002). Location decisions are considered to have a long-term perspective and are less flexible for some retail formats such as grocery and drug retailers (Ailawadi and Keller 2004). In line with this Corstjens, Corstjens et al. (1995) stated *"retailers are physically tied to a fixed set of locations"*.

- In Segmentation. The marketing concept is based on the observation that markets are heterogeneous. Marketing oriented companies must select a homogeneous group where to compete. In order to satisfy the different types of consumer needs, manufacturers develop different types of brands, each one targeted to the needs of a specific subgroup of consumers. Segmentation is also being applied in retailing but its relevance in some retail sectors is limited. Some types of retailers cannot segment consumers to the same degree as manufacturers. Since they operate with very narrow margins, high sales volumes are needed to maintain their profitability. For instance, grocery retailers, proximity retailers and category killers cannot

afford to become too specific by addressing the needs of a homogeneous subgroup of consumers within their geographic market. So, retailers must appeal to a broader base of customers. This difference has major implications for almost every aspect (positioning and image, products offered, price range, quality offered) of the retail brand strategy. Grocery retailers must try to generate traffic and sales from all the people in their market area. So, the concept of segmentation in retailing has major limitations (Corstjens, Corstjens et al. 1995). There are though some exceptions to this statement. As the grocery market becomes highly competitive and reaches maturity, it makes more sense for retailers to follow a segmented strategy. Examples of this approach are Aldi and Lidl.

- In brand attributes. A product brand has several tangible and intangible attributes that comprise “the ingredients” of the brand name. A retail brand, on the other hand, has a much greater number of brand attributes. The retail brand has to manage: thousands of different product lines, each one with a different product range, price, quality, etc.; a large number of stores each one usually in a different (local) shopping environment; a large number of in-store employees who might influence the level and the consistency of service.
- In communicating with consumers. Manufacturers do not come in direct contact with their consumers. They can communicate with them using advertising, sales promotion or through the retailers. Especially in the fmcg category, that decision-making mostly takes place at the point of purchase; retailers become a very important communication channel. To make the most

out of that, manufacturers must adapt the strategy of their product brands to meet the unique requirements of retailers (product, price, placement, promotion, Pop media). Retailers, in contrast to manufacturers, come into direct contact with consumers. This unique advantage provides them with: access to information related with consumer buying behavior; direct communication with consumers; control over shelf space and product position; control over in-store promotions and the ability to built direct customer relationships (Corstjens & Corstjens 1995).

- In the rate and diversity of change. Even though the challenges from drastic market changes and competition apply to both product brands and retail brands, the former have a far more challenging task. Retailers have to deal with changes in the consumer behavior of their broader customer base and in the multiple and diverse shopping environments in which they operate. Furthermore, they have to handle changes that come from their numerous suppliers. So, they have to deal with a higher rate of change.
- In positioning. It is more difficult to develop and maintain a clear position for a “retail brand” than for a “product brand”. This is due to the multiplicity of “retail brand’ attributes and the higher rate of change in the retail market. Especially in the case of food retailers who need to attract a large and diverse range of consumers (Wileman and Jary 1998).
- In internal communication. Manufacturers usually have several different brands in a market. Each brand has its own strategy and should be managed differently. So, the challenge for manufacturers is that they have to secure

the adoption of a consistent brand strategy from all members of a brand's team (de Chernatony 1997). Retailers, on the other hand, usually have to manage one brand name and that is the name of their store. They have one strategy but they have many stores in several different locations. Their challenge is that they have to communicate and secure the adoption of a consistent strategy for their brand among all stores and all employees.

- In organizational structure. Retail brands operate with a different organizational structure. The multiplicity of retail brand attributes, along with the higher rate of change in the retail environment, require more decentralized decision-making and control down to the store level. Producer brands, especially of fmcg, typically use a Brand Manager structure, while retailers use an organizational structure where power is split between Buying and Merchandising (B&M) and Store Operations. Additionally, the large number of in-store employees may bring complications in the recruitment, selection and training of these people (Wileman and Jary 1998, pp.123-125).

2.4.2 Drivers for "Retail Brand" Growth

Historically, producers have dominated the consumer goods industry. It seems though that this situation has now changed in almost every market. Retailers are capturing more power. So, we can no longer consider them as merely a "channel member" but rather as strong brands themselves. Many European countries, and particularly the U.K market, provide good examples of the strength of retail brands. In Table 2.3, we find some of the most successful "Retail

Brands" in the fashion industry, home lifestyle and grocery industry along with some "Product Brands" in tangible goods and services.

Wileman and Jary (1998) indicate that the most important factors that drive the growth of retail brands are: the globalization of retailers; the increase in retail scale and concentration; the centralization of retail decision-making; the shift to large space out-of-town formats that have become destination stores; the technology available to retailers; and the availability of manufacturing resources capable of supplying retailers with good quality store brands. It is well established that trade concentration has increased in most European countries over the past twenty years.

Table 2.3: Examples of Retail Brands and Product Brands

Retail Brands	Product Brands
Benetton, Victoria's Secret, Gap, Esprit IKEA, Laura Ashley and Habitat Tesco, Sainsbury, M&S, Boots, Costco, Carrefour, Wal-Mart, Loblaw	Tide, Mars, Coca-Cola, Kellog's Holiday Inn, American Express President's Choice

Source: Wileman and Jary 1998, pp.57-70

Using their growing importance and power in the channel of distribution, large retailers have built their relationships with suppliers, and have expanded at the expense of small independent retailers (Ailawadi, Borin et al. 1995). Soon though they realized that value-chain power alone is not enough to gain and maintain consumer loyalty, and to provide them with a sustainable competitive advantage against other strong retailers. Grocery retailers operate in a market with slow growth and intense competition, so in order to increase differentiation

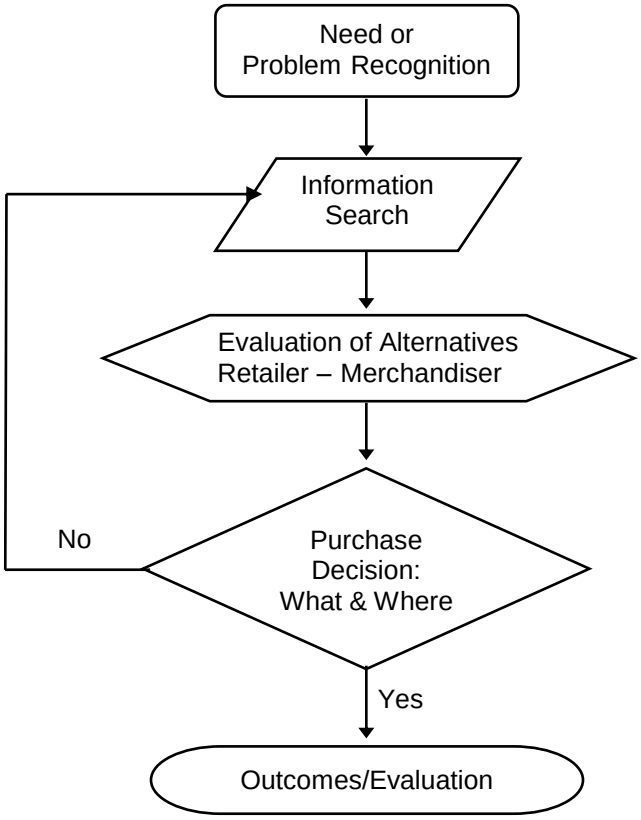
from other retail stores and sustain competition, they “borrow” marketing expertise and practices that were developed by manufacturers. Retailers are becoming more marketing oriented and are increasingly trying to develop themselves as brands (Kristensen, Juhl et al. 2001; McGoldrick 2002; Ailawadi and Keller 2004).

2.4.3 Considerations in “Retail Brand” Development

The marketing concept holds that an organization should try to provide products that satisfy customers’ needs better than its competitors, and at the same time allow the organization to achieve its business goals. Companies in the consumer goods industry were the first to adopt the marketing concept followed by the service industry (Kotler and Keller 2006).

A widely quoted model of consumer behavior developed by Engel, Kollat and Blackwell (1968) can also be applied to retailing. According to this model, consumer decision-making is an ongoing series of processes whereby products are sought and evaluated in terms of the consumer’s goals and future purchases are influenced by previous experience. The model combines need-satisfying behavior with a wide range of motivating and influencing factors. As we can see in Figure 2.2, the buying process is broken down into five steps that consumers go through when buying a product and/or service: need or problem recognition, information search, evaluation of alternatives, purchase decision (the selection of both the product and the retail outlet) and outcomes (the post-purchase evaluation that might lead to either satisfaction or dissatisfaction).

Figure 2.2: The Decision making process



Source: Adapted from Kotler & Keller 2006, p.184

The ultimate goal of consumers as they progress through the decision-making process is to satisfy their needs and desires. As we can see in Figure 2.2, consumers need to make two types of decisions. One is what brand or item to buy and the other is where to buy it. The process for selecting a retail store or else a retail brand is the same as selecting a product brand (Laaksonen 1993). Retailers must understand consumers' buying behaviors and decision-making processes and through their marketing strategy should try to:

- add their store in the consumers' evoked set and
- influence the sequence of these two decisions. So, consumers will first decide where to buy and then what to buy.

Reaching the first objective requires the achievement of awareness and the creation of interest for the retail brand. So, consumers will visit retailer's store to buy their favorite brand. If consumers are not considering their store, then they do not have a chance of being selected. So, this is the minimum retailers can achieve. Achieving the second objective is obviously more advantageous to the retailer. In this case, consumers will first decide from which store to make their purchase, and then search and select among the brands that are offered in that store (Brand and Cronin 1997). How well they manage to do this will be reflected in the retailer's marketing performance and profitability. It appears that in the fast moving consumer goods industry consumers are more loyal to retailers than to product brands (Burt 2000).

The most often used measures of performance are market share and profitability (Green, Barclay et al. 1995). While market share can be considered a direct outcome of a retailer's marketing strategy, profitability is a measure of overall business performance. Some other key measures of the overall retail marketing performance are: store image, customer satisfaction, and store loyalty (Babin and Griffin 1998). Just like market share, we consider these to be outcomes of the marketing strategy. When measuring them, we also measure the effectiveness of our marketing strategy. So, there is a cause (customer satisfaction, store loyalty, and store image) and effect (market share and profitability) relationship between these variables. In the next sections, we will provide a conceptual background for retail brand image or store image.

2.5 "Retail Brand" Image

Manufacturers give names to the products they offer and these are their brand names. Retailers give names to their store(s) so we should also consider these as their brand name. So, the name of the store is the retailer's brand name and as such has a series of values, which generate an image.

The concept of image is an important variable in the formation of human behavior and it greatly influences a consumer's decision-making process. Image is also a major component of a retailer's "brand equity" (Aaker 1992). Early studies have revealed that humans function or react not in response to what is true, but to what they believe to be true (Lindquist 1974).

2.5.1 Definitions and Determinants of "Retail Brand" Image

Defining brand image has proved to be a difficult and a conflicting task. Dobni and Zinkhan (1990) attempted to provide a collection of the various definitions of brand image and found 28 different definitions. In Table 2.4, we present some of these definitions in chronological order. Looking at these different definitions, we can make some observations. Firstly the definition of brand image has changed over the years and secondly there is no consensus over the elements that comprise brand image.

Even though there is no consensus amongst researchers about the definition of brand image, in all these studies, researchers have agreed that image is comprised of a group of dimensions or attributes. We can use the

definitions of brand image to also define company image and store image, except that we apply them to companies and stores rather than brands (Hawkins, Best et al. 2004).

Table 2.4: Definitions of Brand Image

Author/s	Year	Definition of brand image
(Herzog 1963)	1963	"the sum total of impressions the consumer receives from many sources…All these impressions amount to a sort of brand personality which is similar for the consuming public at large, although different consumer groups may have different attitudes toward it"
(Bird, Channon et al. 1970)	1970	"a brand image is an attitude about a given brand"
(Levy and Glick 1973)	1973	"the concept of brand image aptly sums up the idea that consumers buy brands not only for their physical attributes and functions, but also because of the meanings connected with the brands"
(Levy 1978)	1978	"a brand image is a constellation of pictures and ideas in people's minds that sum up their knowledge of the brand and their attitudes towards it"
(Bullmore 1984)	1984	"a brand's image is what people think and feel about it: and those thoughts and feelings will not – cannot – be universally identical…The image lies in the mind of the beholder – and is conditioned at least as much by the nature of the beholder as by the nature of the object itself"
(Sirgy 1985)	1985	"products are assumed to have personality image, just as people do…These personality images are not determined by the physical characteristics of the product alone, but by a host of other factors such as advertising, price, stereotype of the generalized users, and other marketing and psychological associations"
(Friedmann and Lessig 1987)	1987	"brand image is the consumer's understanding and evaluation of the product"
(Osselaer and Alba 2000)	2000	"Brand image is what consumers have learned about the brand"
(Arnould, Price et al. 2004)	2004	"the perceptions about a brand as reflected by the associations held in consumer memory. Consumers have a variety of different associations with brands"

One of the earliest definitions of store image is that of Martineau (Martineau 1958): *"The way is which the store is defined in the shopper's mind, partly by its functional qualities and partly by an aura of psychological attributes*. Using the above definition, we can say that the store images held by consumers are formed selectively from a combination of factual (e.g., tangible) and emotional (e.g., intangible) material. McGoldrick (2002) provides a detailed list of store image elements. His list contains 18 general areas and 90 more specific elements that have been identified in previous studies.

2.5.2 Outcomes of "Retail Brand" Image

There is a convergence between the concepts of store image and a retailer's brand equity. A retailer with a strong image is also expected to have strong brand equity. There are some situations where the brand equity of major retailers exceeds that of the leading suppliers. Brands such as Coca-Cola and Tide are powerful but restricted to narrow categories. The Carrefour brand, on the other hand, has more attributes. It can be reinforced through their stores, staff, loyalty program and the Carrefour branded products.

Retailers have progressed from being just merchants and collecting "rent on their shelf space" to being retail brand managers (Kumar 1997). Their efforts have been aimed at creating retail brand awareness and differentiation. We have come to a point, where the brand names of some of the major retailers have achieved higher customer awareness than some of the leading manufacturers' brand names. Additionally, a retailer with a well established

brand image and strong brand equity could achieve a competitive advantage over the other retailers.

Store brands play a key role in the development of this brand equity and in the retailer's marketing plan. "Quality Store Brands" can help retailers to achieve greater store differentiation, higher store loyalty and higher profits for the retailer (Corstjens and Lal 2000; Collins-Dodd and Lindley 2003). From the consumers' perspective, one obvious reason for their popularity and growth is their lower prices. Nevertheless, high quality seems to be more important than low price for the long-term success of Store Brands (Hoch and Banerji 1993). The aim of this research is to establish a link between the retailer's brand equity and its store brands. So, in the next sections, we will elaborate more on the subject of store brand.

2.6 Evolution of Store Brands

The SB concept is not an innovation of the twentieth century. Historically, SBs preceded MBs but the SB concept, as we know it today, has progressed through different phases (Burt 2000).

Phase I: The Primitive SB. Consumers were purchasing their grocery products from retailers unpacked, most of the times in bulk, and without a brand name; they were simply asking for products using their "generic" name (i.e. soap, rice, etc.). Only some small manufacturers or craftsmen were "marking" their products but because of production and transportation limitations they were

selling them to a small number of retailers or directly to end consumers through fairs and the open markets. At this stage, retailers were selling commodities. In return, customers were using the name of the shopkeeper as a guarantee of quality for products. Some other important characteristics of Phase I are: (a) short channels of distribution and (b) that retailers dominated the relationship with the end consumers (Morris 1979; Simmons and Meredith 1984; Davies 1990; Keller 1998, pp.25-27).

Phase II: The Manufacturer Revolution. The industrial revolution along with the transportation revolution allowed manufacturers to produce large quantities of standardized high quality products at a low cost. As a consequence, we had the separation of manufacturing from retailing (Davies 1990). At the end of the nineteenth century, manufacturers introduced products using their own brand names and trademarks. Some of the very first brand names were: Pears soap in 1789 (the world's first registered brand), Coca-Cola in 1886, Kodak in 1888, Uneeda biscuits in 1898, Shell and Heinz. The emergence and establishment of manufacturer brands saw the decline of the Primitive store brands. Manufacturers became more sophisticated in producing, marketing and selling their brands. They invested money in improving production processes, in developing new innovative products or modifying existing products, in offering products of consistent quality and in advertising the benefits of their brands to consumers. The outcome of their efforts was the development of consumer demand and loyalty towards their brands. So, retailers were pressured to purchase and display the manufacturer's brands at the terms that

were imposed by manufacturers (Kumar and Steenkamp 2007, pp.1-2). During Phase II, manufacturers dominated the channels of distribution and consequently their brands dominated the market.

The above situation was reflected in “American Capitalism” written in the 1950s by Professor J.K. Galbraith of Harvard. In his book Galbraith identified the trend towards the accumulation of power in the hands of manufacturers and the threat of them becoming so strong that they would determine the whole of production and consumption in the U.S.A. Fearful that this trend would continue, he proposed that the Federal Government should take action to prevent this. Their dominance lasted from the end of the nineteenth and for most of the twentieth century (Keller 1998, pp.28-29; Wileman & Jary 1998, p.11; Corstjens & Corstjens 1995, p.140; Morris 1979; Davies 1990).

Phase III: The Retail Revolution. The driving force behind the “Retail Revolution” was an increase in consumer mobility due to the higher usage of cars as mass transportation. Consumers could travel longer to benefit from larger, more efficient stores that offered more variety and wider assortments (Corstjens and Corstjens 1995, pp. 99-100; Wileman and Jary 1998, pp. 11-14). In the 1970s, retailers moved away from the traditional mom-and-pop stores. They became large powerful organizations, centralized, sophisticated and highly concentrated. A Deloitte & Touche (Touche 2004b) report points out that “the world’s largest company is also the world’s biggest retailer”. Table 2.5 below provides some numerical evidence of the retailers’ size in terms of revenues and growth rates during the last few years.

Table 2.5: Sales and Growth rate of Worlds' Largest Food Retailers

US$ million	2006	2007	2008	2009	2010
Wal-mart	248.368	378.476	404.374	408.085	421.849
		52,4%	6,8%	0,9%	3,4%
Carrefour SA	102.850	121.533	123.360	124.210	122.438
		18,2%	1,5%	0,7%	-1,4%
Tesco PLC	83.723	93.038	77.131	86.788	98.212
		11,1%	-17,1%	12,5%	13,2%
Metro AG	76.922	93.686	95.001	93.821	89.988
		21,8%	1,4%	-1,2%	-4,1%
Ahold	36.728	36.635	36.070	40.005	39.510
		-0,3%	-1,5%	10,9%	-1,2%

Source: Reuters, Company Views, 31/05/2011

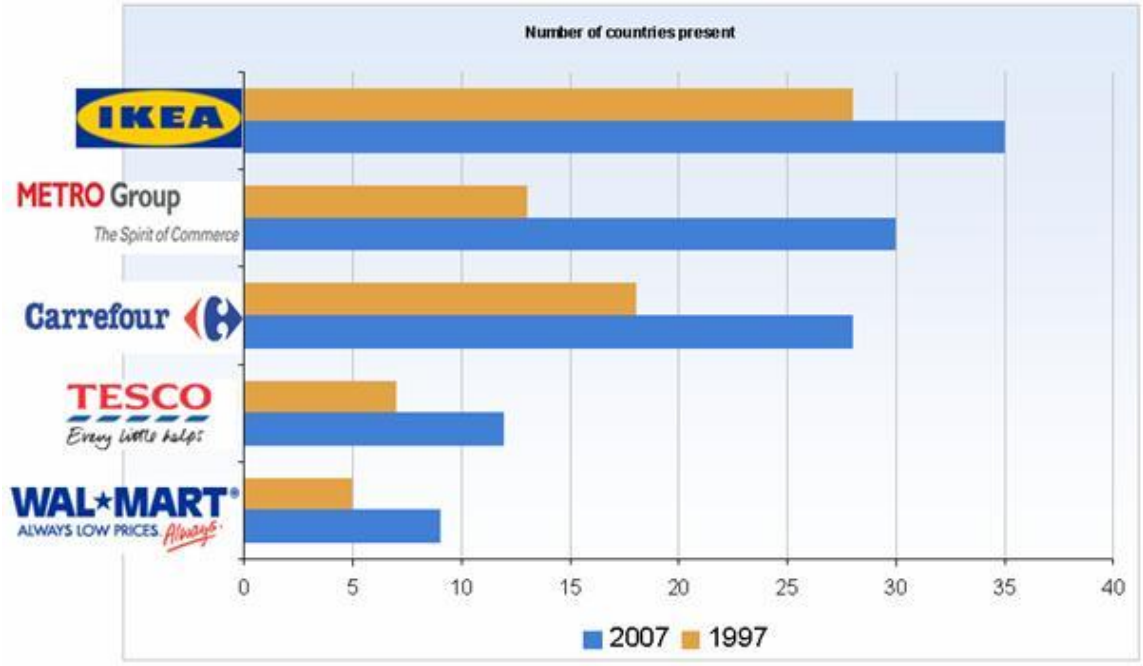
Retailers started to expand within their national borders and later some expanded internationally. During 1980s western food retailers expanded into southern Europe and in the 1990s into central Europe (Bell, Davies et al. 1997). Companies such as Ahold, Carrefour, Lidl, Metro, Tesco and Wal-Mart, became major global players with stores in numerous markets (Deloitte & Touche, 2004a). Table 2.6 specifies the number of stores that each of the above mentioned retailers owns along with the number of countries in which they operate. In terms of global expansion, from Table 2.6 and Figure 2.3, we see that Wal-Mart has tripled the number of countries in which they operate (from 5 in 1997 to 15 in 2008) while Carrefour has almost doubled their presence during the same period of time.

Table 2.6: International Expansion of Top Retailers

End of 2008	Number of	
	Stores	Countries present
Carrefour	15.430	30
Tesco PLC	3.728	14
Metro AG	2.200	31
Ahold	2.909	10
Wal-mart	8.416	15

Source: Datamonitor, Industry Profile, "Global Food & Staples Retail", March 2010; Retailers' website

Figure 2.3: Global Expansion of the top 5 Retailers from 1997 to 2007



Source: Euromonitor International

During Phase III, the balance of power between retailers and manufacturers changed. Manufacturers could no longer dictate to retailers what products to buy and the terms of the transaction. Retailers became the dominant players in the control of the channel of distribution (Kumar and Steenkamp 2007; Lincoln and Thomassen 2007). Their increase in size provided them with the

critical mass to offer their customers SBs. Therefore, during this phase SBs were “reintroduced” (Steenkamp and Dekimpe 1997).

Retailers, from the early stages of Phase III, had to cope with intense competition from other retailers (Frank and Boyd 1965). They eventually became more marketing oriented and many of them are now striving to adopt the marketing concept. Retailers realized that they were obliged to: (a) differentiate their stores from competitors, (b) increase loyalty among shoppers and (c) improve their profitability. SBs were used as a strategic tool towards the achievement of these objectives.

2.7 The Driving Forces behind Store Brand Growth

The introduction of both generics and SBs is considered the most significant innovation in retail marketing in the 1980s (Burck 1979). It is estimated that the FMCG industry generates 67% of total SB sales. So, their introduction and growth represents one of the biggest challenges to companies that market MBs to the retail industry. In this section, we will present various factors that contributed to the SB growth and expansion to different product categories and to different countries.

The SB concept is evolving in order to adapt to the changes in external macroeconomic conditions and in consumer characteristics. As the concept evolves, we have changes in retailer and manufacturer strategies and changes in consumer perceptions (Laaksonen and Reynolds 1994; Wileman and Jary 1998).

Retailers use a variety of strategies for their SBs with differences in the type of brand name selected for their SB, the level of price, quality and sophistication. For instance, a SB may carry the retailer's name (e.g. Kroger or Sainsbury's) or a name distinctive to the retailer (e.g. No7 at Boots, or Kirkland at Costco). Furthermore, retailers might select to offer their shoppers a the very "plain" SB with a substantially lower price or to imitate the leading brand at a lower price or to offer more premium SBs offering higher customer value that are priced at parity or sometimes premium to MBs (e.g. at retailers such as AB, Royal Ahold, Tesco that have introduce and sell organic SB lines). UK retailers have developed the most sophisticated SB concepts and are leading the SB drive (Burt 2000).

The phenomenal growth and significance of SBs to manufacturers, retailers and consumers has attracted the interest of many researchers. A review of the literature reveals that SB penetration cannot be explained with a single variable. Instead there are some factors that drive and some that inhibit SB growth. Overall we can group them into three main areas: (a) factors related to the market, (b) factors related to consumer characteristics and (c) factors related to consumer perceptions and habits. In this section, we will present the findings under these headings and explain sales fluctuations among the different markets, product categories and retailers. However, when assessing these studies, it is important to recognize which phase of the SB life cycle the market was in at the time that the research was carried out.

2.7.1 Store Brand Growth due to Market Factors

Overall, market factors are related to retail market structure, economic conditions, general market conditions, and the manufacturers' and the retailers' strategies. Table 2.7 at the end of this section provides a summary of the studies that try to explain the reasons for the SB growth through market factors.

Changes in the retail market structure: The internationalization of retailers, and the trend towards higher retail power and concentration. As we indicated in section 2.6 in phase III, retailers through market expansion and through mergers and acquisitions increased their size relative to their suppliers and or manufacturers of branded products. They have enhanced their role in the supply chain and have geographically spread the distribution of SB to the same levels as MB (de Chernatony 1989a). Richardson (1997) indicated that consumers who purchase SBs tend to buy them at the store at which they usually shop. So, there is a positive relationship between chain penetration and SB sales growth. For instance, with the expansion of the French retailer Carrefour, its SBs are now being marketed in thirty different countries (de Chernatony 1989b; Bell, Davies et al. 1997; Baltas and Argouslidis 2007). Additionally, in many countries, the retail trade has become highly concentrated and this has a positive effect on SB growth (Hoch 1996; Quelch and Harding 1996; Richardson 1997). Cullen and Whelan (1997) have indicated that an important outcome of higher retail concentration is that a brand's total market share will increase if its market share in a key retailer is equal or higher than the brand's national market share. So, an increase in retail concentration is to the benefit of those brands that hold a strong

position or are being sold exclusively through that retailer, like SB. Overall, the trend towards higher trade concentration along with international expansion has provided retailers with the critical mass and ability to develop economies of scale in developing and marketing their SBs (Hoch 1996; Jan, Steenkamp et al. 1997; Steenkamp and Dekimpe 1997).

Economic conditions. Several studies claim that SB sales increase during periods of recession and decrease in periods of economic growth (Simmons and Meredith 1984; Hoch 1996; Quelch and Harding 1996; Cotterill, Putsis Jr et al. 2000; Lamey, Deleersnyder et al. 2007). Hoch and Banerji (1993) have linked SB market share with personal disposable income. They found that SB share and disposable income follow a different direction (are inversely related). So, when disposable income falls, consumers become more price conscious, switch to SB and therefore SB share increases. The relationship between price sensitivity and SB sales has also been stressed by Ainslie and Rossi (1998). They found that the less price sensitive consumers are, the lower SB sales are.

Retailers' Strategies. Researchers indicate that SBs help retailers to: (a) increase store traffic (Corstjens and Lal 2000), (b) increase store differentiation and loyalty (Nandan and Dickinson 1994; Steenkamp and Dekimpe 1997; Corstjens and Lal 2000; Ailawadi and Keller 2004), (c) create and support an image (Quelch and Harding 1996), (d) improve their bargaining power and control over their shelf space (Hoch 1996; Steenkamp and Dekimpe 1997) and (e) increase profitability (Simmons and Meredith 1984; Corstjens, Corstjens et al. 1995; Quelch and Harding 1996; Dunne and Narasimhan 1999; Ailawadi and

Harlam 2004). So, retailers through their strategies have tried as much as possible to exploit their SBs. Several researchers have identified the positioning of SBs as a key factor in the level of their acceptance (Raju, Sethuraman et al. 1995; Sayman, Hoch et al. 2002; Chan Choi and Coughlan 2006). The improved quality in SBs, the extension of SBs into different product categories, and the introduction of premium SBs are factors that drive SB growth (Quelch and Harding 1996). In addition, Dhar and Hoch (1997) have found that the promotion intensity for the SB, the quality assurance provided by the retailer for his SBs, and the use of the retailer's name are some of the factors which positively influence SB performance, whereas a large depth of assortment carried by a retailer inhibits SB performance.

Manufacturers' Strategies. Manufacturers can select three different strategies. They can select to produce only their own (manufacturer) brands, or produce and sell only SBs, or they can adopt a mixed strategy and produce both SBs and their own branded products. The decision over which strategy to follow is mainly driven by such factors as the economies of scale in both production and marketing, the elasticity of demand, the technical complexity of the product, and production capacity. The strength of the manufacturer is a factor that influences SB sales. If a manufacturer holds a leading position with a strong market share and high advertising spend, then there is less room for SBs to develop. A manufacturer through the development of strong brand equity can generate a perceived difference for his brand. Therefore, in this case, SB penetration is low (Morris 1979; De Wuif, Odekerken-Schroder et al. 2005). On the other hand,

manufacturers that are not dominant players in the channel of distribution and whose brands are not market leaders might try to take advantage of the benefits that SB provide (Morris 1979; Quelch and Harding 1996; Dunne and Narasimhan 1999). Manufacturers when supplying SB are able to: (a) obtain or protect their market share, (b) off-load excess capacity, (c) lower their distribution cost, (d) lower their promotional expenses, as they do not need to spend on national advertising campaigns. On the other hand, the threats involved with such a decision are that they may undermine their own branded products and they may become over-reliant upon a retailer (Morris 1979; Quelch and Harding 1996).

Table 2.7: Reasons for Store Brand Growth – Market Factors

Author/s	*Findings*
Morris (1979)	SB penetration is related to concentration in the MB sector. SB penetration is positively related to the price differential. High power of the manufacturer and high advertising spending inhibit SB penetration.
Hoch and Banerjee (1993)	Factors that drive SB growth: product categories that are easier for retailers to imitate, SB level & consistency of quality, product category sales & gross margin. Factors that inhibit SB growth: large number of NB manufacturers, high advertising expenditure by NB.
Halstead and Ward (Halstead and Ward 1995)	The most common reaction from NB is to drop their prices.
Raju, Sethuraman et al. (Raju, Sethuraman et al. 1995)	The SB share is greater when there is high price competition between national brands and SB while the SB share is lower when there is high competition among national brands.
Quelch & Harding (1996)	SB sales increase when the economy is suffering.
Dhar and Hock (Dhar and Hoch 1997)	Explains factors that are related to retailer's overall strategy or to manufacturers actions.
Richardson (1997)	SB market share is consistent with chain penetration.
Cotterill, Putsis & Dhar (2000)	SB sales increase during periods of economic

	recession.
Sayman, Hoch et al. (Sayman, Hoch et al. 2002)	Strategies of SB or positioning of SB.
Myers and Alexander (Myers and Alexander 2007)	The expansion of French and German retailers has increased SB penetration.

2.7.2 Store Brand Growth due to Consumer & Situation Characteristics

It is widely accepted that the most important reason for buying SBs is their low price (Alan, Dick et al. 1995; Baltas 1997; Cotterill, Putsis Jr et al. 2000). So, we posit that factors that increase price sensitivity are more likely to drive SB growth. The literature review has revealed that price sensitivity is influenced by demographics, namely income and family size, and shopping behavior such as shopping frequency and level of expenditures (Ainslie and Rossi 1998). Therefore, in this section, we will consider some of the factors that are related to consumer characteristics, such as demographics, shopping orientation, consumer involvement and the usage situation. A summary of findings is presented on Table 2.8.

In terms of the *Demographics*, the literature review reveals that there are no conclusive results that link demographic or socio-economic characteristics with the propensity to purchase SB (Livesey and Lennon 1978; Baltas and Argouslidis 2007). In terms of *Product & Purchase Involvement,* the literature review reveals that SB consumers are more innovative and have a greater product knowledge and involvement with their purchases (Granzin 1981). Furthermore, involvement with the product category is one of the variables that influence the decision to purchase SB; this influence though is not direct but

through the variables that determine personal involvement. In terms of the *Usage Situation,* the literature review reveals that it affects the propensity to buy SB. Light usage or usage on special occasions negatively affects SB purchases. For instance, English consumers tend to serve MB tea to guests or in social settings but are more likely to consume SB tea when they are alone and their behavior cannot be observed (Livesey and Lennon 1978; Baltas and Argouslidis 2007).

Table 2.8: Reasons for Store Brand Growth – Consumer and Situation Characteristics

Author/s	*Findings*
(Szymanski and Busch 1987)	Age has a small negative influence on the propensity to purchase generic brands.
(Hoch 1996)	The higher the household income the lower the price sensitivity, the lower the SB performance. Large households are more price sensitive and thus more prone to purchase SBs.
(Richardson, Jain et al. 1996a)	SB drivers: the level of familiarity, the higher the perceived risk associated with using SBs
(Baltas 1997)	Inhibit SB growth: high involvement with the category, low familiarity & psychological proximity Drive SB growth: low price, consumers tendency to try new things, overall satisfaction with the category, frequency of shopping, high quantity requirements.
(Ainslie and Rossi 1998)	SB do well in categories that consumers are price sensitive. Price sensitivity is influenced by demographics & shopping behavior; plus is different across product categories.
(Miquel, Caplliure et al. 2002)	Explains differences in consumer characteristics across product categories.
(Veloutsou, Gioulistanis et al. 2004)	The different rate of adoption across countries can be explained with differences: in SB familiarity, in the choice criteria, in the evaluation, in the willingness to try SB & to change behavior.
(Baltas and Argouslidis 2007)	Education and income have a positive effect on SBs.

2.7.3 Store Brand Growth due to Consumer Perceptions

It is widely accepted that there are differences in consumers' perceptions between MBs and SBs. Table 2.9 provides a list of the studies that try to explain SB growth due to consumer perceptions. Many studies directly or indirectly suggest that SBs are perceived to be inferior to MBs and thus a riskier purchase (Dunn, Murphy et al. 1986; Omar 1994; Richardson, Dick et al. 1994). This perception is observed in all dimensions of risk – functional, financial, social, psychological, time – and inhibits SB purchase intention as well as the intensity of consumption (Mieres, Martin et al. 2006).

Reviewing studies that try to find a link between variations in perceptions and SB growth, we see that the perceived relationship between price and quality is the most important reason for consumers to purchase SBs (Livesey and Lennon 1978; Cunningham, Hardy et al. 1982). SB buyers assess product quality differently than non-buyers. SB consumers do not rely on brand name when assessing overall product quality and when making their purchase decisions. Especially when consumers are familiar with the product category, they do not need to rely as much on extrinsic cues and consequently the perceived risk and the perceived quality variations are lower. However, when the level of familiarity with a product category is low, the reliance on extrinsic cues increases, an area where SBs are weak (Dick, Jain et al. 1996; Richardson, Jain et al. 1996b; Baltas 1997).

Furthermore, the growth in SB sales may be attributed to increase in price consciousness as well as to the improvements that SBs have made. SBs have

moved beyond being just cheap imitations of the well-known brands, towards providing consumers with other benefits that contribute to an overall perception of value (Sinha and Batra 1999).

Table 2.9 Reasons for Store Brand Growth – Consumer Perceptions

Author/s	*Findings*
Cunningham, Hardy & Imperia (1982)	Differences in perceptions among loyal customers of national, store, generic brand and those customers that have no brand loyalty.
Richardson, Dick & Jain (1994)	SB have a poor perceived product quality.
Dick, Jain & Richardson (1996a)	SB buyers vs. non-buyers differ in the extend to which they utilize the 4 extrinsic cues (price, brand name, advertising, packaging) when assessing any of the 3 intrinsic attributes (overall quality of the brand, quality of ingredients, taste). SB buyers do not believe that brand name is a predictor of taste or that high price results in higher quality.
Richardson, Jain & Dick (1996)	Drive SB growth: the perceived value for money offered, Inhibit SB growth: the perceived risk associated with using SB.
Richardson (1997)	SB are not differentiated among themselves and are perceived to offer similar levels of quality.
Batra & Sinha (2000)	Consumers are more likely to buy SB in product categories that: they perceive lower consequences of making a mistake and lower variability in quality levels across brands; they think they can accurately judge the quality of important product attributes on written descriptions alone.
(Erdem, Ying et al. 2004)	Differences in consumer perceptions explain differences across countries.
Mieres, Martin & Gutierrez (2006)	SBs are perceived as a riskier purchase than NB.

2.8 Differences in the Rate of Store Brand Adoption

In the previous section, we have provided some basic trends concerning the rate of adoption of SB and some elaboration for their growth. In this section, we will refer to the differences in the adoption rate and growth of SBs across countries, product categories and retailers. The driving forces for SB growth may be enough to explain the reasons for their overall growth and adoption, but not enough to explain the differences in the rate of adoption.

Several studies indicate that the rate of adoption and growth of SB is highly uneven across countries (Erdem, Zhao and Valenzuela, 2004; Veloutsou, Gioulistanis and Moutinho, 2004). A.C Nielsen, one of the leading research companies, has publicized several reports over the last years that demonstrate the trends and the penetration of SBs worldwide. It is estimated that the top 10 countries in SB value share generate approximately 90% of total SB sales (Nielsen, July 2003). According to an Executive News Report by A.C. Nielsen (September 2005) Europe is the most "developed" region with SB having an overall value share of 23% versus a 2% share in Latin America, 4% in Asia and a 16% share in North America. A study conducted in 2010, revealed that even within Europe, there are major differences in SB value share. On the one hand, we have countries such as Switzerland (46%), Germany (32%), Great Britain (43%), Spain (31%) and Belgium (27%) with SB value share amongst the highest in the world, and on the other hand we have countries such as Italy (15%), Poland (14%) and Greece (12%) with very low SB shares (Nielsen 2011).

Additionally, SBs do not exhibit the same rate of adoption and growth across product categories (Hoch and Banerji, 1993; Halstead and Ward, 1995; Richardson, 1997). According to an Executive News Report by A.C. Nielsen (September 2005), the top five product categories in SB value shares are Aluminum Foil (49%), Complete Ready Meals (47%), Refrigerated Milk (43%), Garbage Bags (40%), and Frozen Meat/Poultry/Fish (39%). On the other hand, the categories with the lowest value share are Baby Food and Chewing Gum (1%), Lip Sticks/Gloss (2%), Toothpaste, Deodorants, Beer, Insect Control and Shampoo (3%). Finally, SB do not experience the same rate of adoption across retailers (Dhar and Hoch, 1997).

2.8.1 Reasons for the Differences in the Rate of Adoption

There are some factors that drive and some that inhibit SB growth. Overall, the development and penetration of SBs has been slowest in markets and product categories that manufacturers have managed to differentiate their brands and achieve high brand loyalty. In these markets, manufacturers have captured a strong position and are engaged in heavy advertising spending to support their brands. The next sections present the reasons for the differences in SB growth through the work of others.

2.8.2 Reasons for the Differences across Countries

Quelch and Harding (1996) tried to explain the reasons for the higher strength of SBs in Europe relative to the United States. They suggest that the reasons are

partly associated with external factors such as the regulated television market and partly by the level of trade concentration that is much higher in Europe. Of course, this does not explain the different levels of adoption within the European countries.

Veloutsou, Gioulistanis and Moutinho (2004) explain some of the reasons for the different rates of adoption within Europe by analyzing differences in attitude towards SB in Scotland and Greece. They suggest that some of the reasons for the different rates of adoption are: (a) differences in the level of familiarity and (b) that consumers, in Greece, do not have a similar readiness to buy SB or willingness to change their behavior.

Another study conducted in the United States, the United Kingdom and Spain by Erdem, Zhao and Valenzuela (2004) found that some of the reasons are: (a) differences in the level of uncertainty about the quality of SBs; countries with high uncertainty will have a lower SB market share, (b) differences in quality consistency over time; countries where SBs deliver more consistent quality have a higher SB market share, (c) differences in relative risk behavior; countries that are more risk averse than price sensitive have a lower SB market share, (d) differences in the value consumers assign to the quality versus price; countries that are more price than quality sensitive have a higher SB market share and (e) the differences in the perceived quality between SBs and MBs.

2.8.3 Reasons for the Differences across Product Categories

Shopping behavior and price sensitivity are not the same across product categories (Ainslie and Rossi, 1998). We also know that the low price of SB is the most important motive for consumers to select a SB over a MB (Baltas, 1997). So, the higher the importance of price in a category the higher the SB share (Cotterill et al., 2000; Hoch, 1996). But what variables increase price sensitivity? What variables increase the importance of price? Ainslie and Rossi (1998) found that price sensitivity is influenced by demographics and shopping behavior. Specifically, they found that households with high a level of disposable income or high grocery bills are less price sensitive while large households or frequent shoppers are more price sensitive. Their findings suggest that product categories with national brands that have managed to differentiate themselves and develop strong brand equities are less sensitive to price and less vulnerable to the SB threat. In these product categories the rate of adoption for SB is expected to be lower. Whilst product categories with national brands that do not offer any perceived difference are more price sensitive and the rate of adoption for SB is expected to be higher.

Hoch and Banerji (1993) found that SBs perform better in large categories that offer high margins and compete against fewer national brands who spend less on advertising. Another study by Batra and Sinha (2000) on the consumer-level factors that make SB differentially successful across products categories found that: (a) SB purchases in a category increase as the “consequences of making a purchase mistake” decline and (b) consumers are more likely to buy SB

in categories with more “search” than “experience” attributes. Another factor that affects the level of adoption across product categories is the level of involvement with the product category. The higher the level of involvement with the product category: (a) the more knowledge the individual has, (b) the more attributes is using to evaluate the different alternatives and (c) the more brands in his evoked set (Miquel et al., 2002). From the findings of the above mentioned research, we cannot generalize that SB are more or less successful in low involvement categories. It has been found though that the higher the level of involvement, the higher the possibility of the SB to be selected.

2.8.4 Reasons for the Differences across Retailers

SBs do not experience the same rate of adoption across retailers. Dhar and Hoch (1997) demonstrated, in research conducted in the U.S, that cross-retailer variations in SB performance are related to: (a) retailer’s marketing strategy and actions, (b) manufacturer’s push and pull tactics and (c) the demographic characteristics of a store’s trading area.

Richardson, Jain and Dick (1996a) suggested that attractive store aesthetics positively affect the overall quality ratings of SB while they have no effect on the quality judgment of national brands. Specifically, they found that when the store had attractive store aesthetics, the SB quality rating increases by 21%. Store aesthetics and atmosphere are part of the retailer’s marketing strategy so there is an agreement between this study and the previous one. We should note at his point that store aesthetics have been considered as a major

ingredient of store image. It is not only the quality of the SB offered but also the retailer's strategy that influences the image of SB. Consumers, when assessing products, are influenced by their perception of the company's ability to market these products. So, their beliefs are different by retailer.

2.9 Overview of Chapter Two

This chapter provided a literature review of retail brand development and the retailer's SBs. SBs are part of the overall retail brand strategy so the aim was to establish a link between the marketing strategy for the retail brand and the store brand.

Retailers, through the development of SBs, attempt to differentiate themselves and gain a competitive advantage over other retailers. Mainly due to their low price and yet high quality, consumers responded favorably to the SB concept. We currently have a wide acceptance and penetration of SBs. Consumers, in many cases, have considered the retailer to be a price-cutting hero. On the other hand, manufacturer brand owners have often seen their most important customer, the retailer, transformed into their biggest competitor. The following chapter will present the literature review for the two constructs that make up our research framework, namely customer satisfaction and trust with the SBs.

CHAPTER 3: CONCEPTUAL DEVELOPMENT OF RESEARCH HYPOTHESES

3.0 Introduction

As delineated at the beginning of this thesis, the overall purpose of this study is to examine the role of the retail brand in the penetration of SBs. The literature review presented in the previous chapter has set the framework and the necessary theoretical background for both the retailer brand and the store brand.

This chapter is divided into three sections. In the first section, the researcher reviews relevant studies in the SB literature and identifies research gaps that provide the rationale for this study. In the next section, the conceptual model for the present study is presented and the constructs are developed and justified. The last section outlines the hypotheses for the primary research. The chapter concludes with a summary of the discussion.

3.1 Relevant Studies in the SB Literature Indicating Research Gaps

In this section, we portray the work of five research papers found in the marketing literature that are similar to this research study and identify research gaps that we try to address. These writings pertain to the work of Semeijn, van Riel and Ambrosini (2004), Collins-Dodd and Lindley (2003), Bloemer and de Ruyter (1998), Ailawadi, Pauwels et al. (2008) and Martenson (2007).

Semeijn, van Riel and Ambrosini (2004) conducted an experiment in three major grocery retailers in The Netherlands and in four different food product categories. They developed a model (Figure 3.1) hypothesizing that store image and perceived product attributes influence consumer attitudes towards SBs. They found that store image has a direct, positive and linear relationship to the attitude towards the SBs.

Figure 3.1: Relationships between Store Image, Product category attributes and Store Brand Attitudes

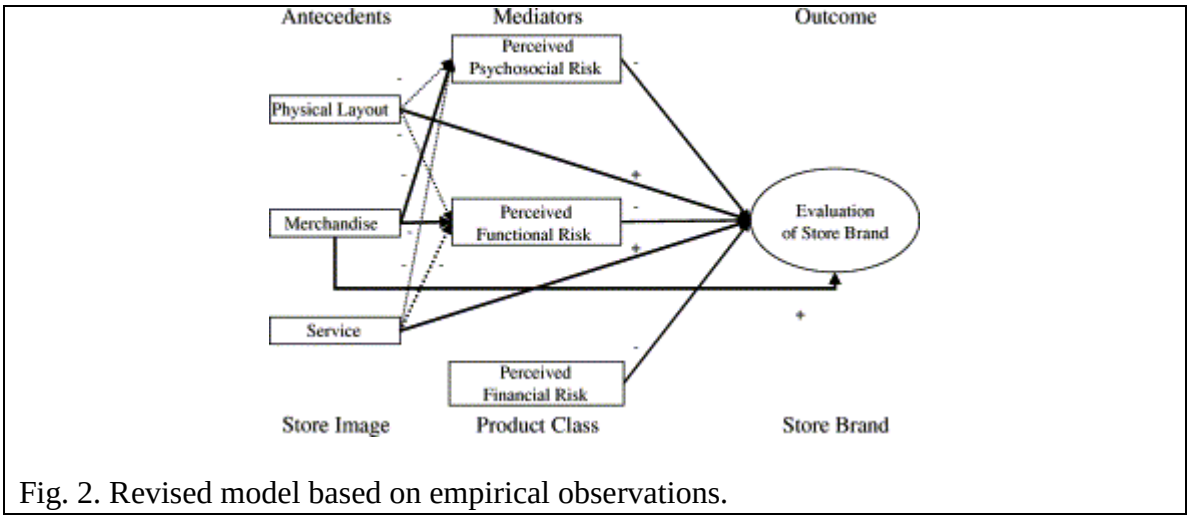


Fig. 2. Revised model based on empirical observations.

Source: Semeijn et al., 2004

Concerning product attributes and associated risks, they found that the perceived risk (functional, psychological and financial) associated with a product category has a negative relationship to the attitude towards the SB and that the perceived risk mediates the effect of store image on SB attitude. Their findings, however, indicate significant differences between the three retailers so they conclude that their model is not complete.

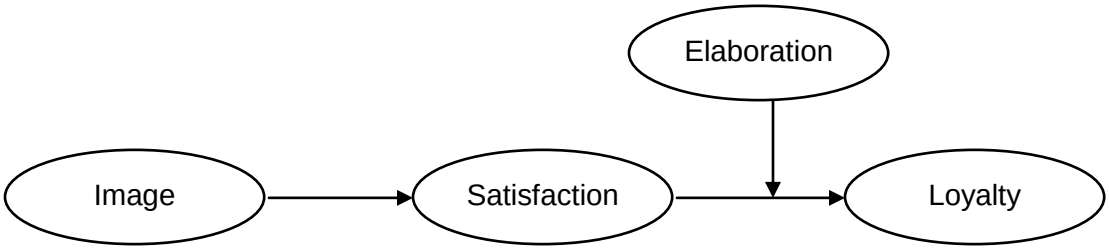
Collins-Dodd and Lindley (2003) examined the effect of store image on the image of SB within the grocery sector. They selected the top three retailers in Canada, in terms of market share, for their study. Their model included the following three variables: the store image for each of the three retailers; the image for the SB category; and the image for the SB of each of the three retailers. They hypothesized that the consumers' perceptions of store image will have a positive association on SB image. They found that the image of the SB category positively affects the image of the retailer's SB, and that the image of the store is positively associated with the image of the retailer's SB. They concluded that store image could be used to predict SB evaluation.

One should note that neither study examines the effects of customer satisfaction with the store within their proposed theoretical frameworks. This seems to be something that is required, since satisfaction has a direct effect upon store loyalty and its overall role seems to be very important. Bloemer and de Ruyter (1998) found that the effect of store image on the behavioral component of attitude (loyalty) is indirect, and that satisfaction with the store is a mediator in this relationship (see Figure 3.2). So, in our study, we develop specific research hypotheses for the relationship linking customer satisfaction with the store, SB purchases and the level of trust in the SBs.

Bloemer and de Ruyter (1998) also found that there are two components to the image of SBs. One component is related to the overall image of the SB as a category and the other is "store specific". Specifically, they indicated, *"…research has dealt with the phenomenon of store brands as a concept that is*

different from national brands, but does not explore store specific brand influences". This study addresses their call in that we need to develop specific research hypotheses for the SBs by major retailer and to add other dimensions of satisfaction and loyalty such as word of mouth.

Figure 3.2: Empirical Model



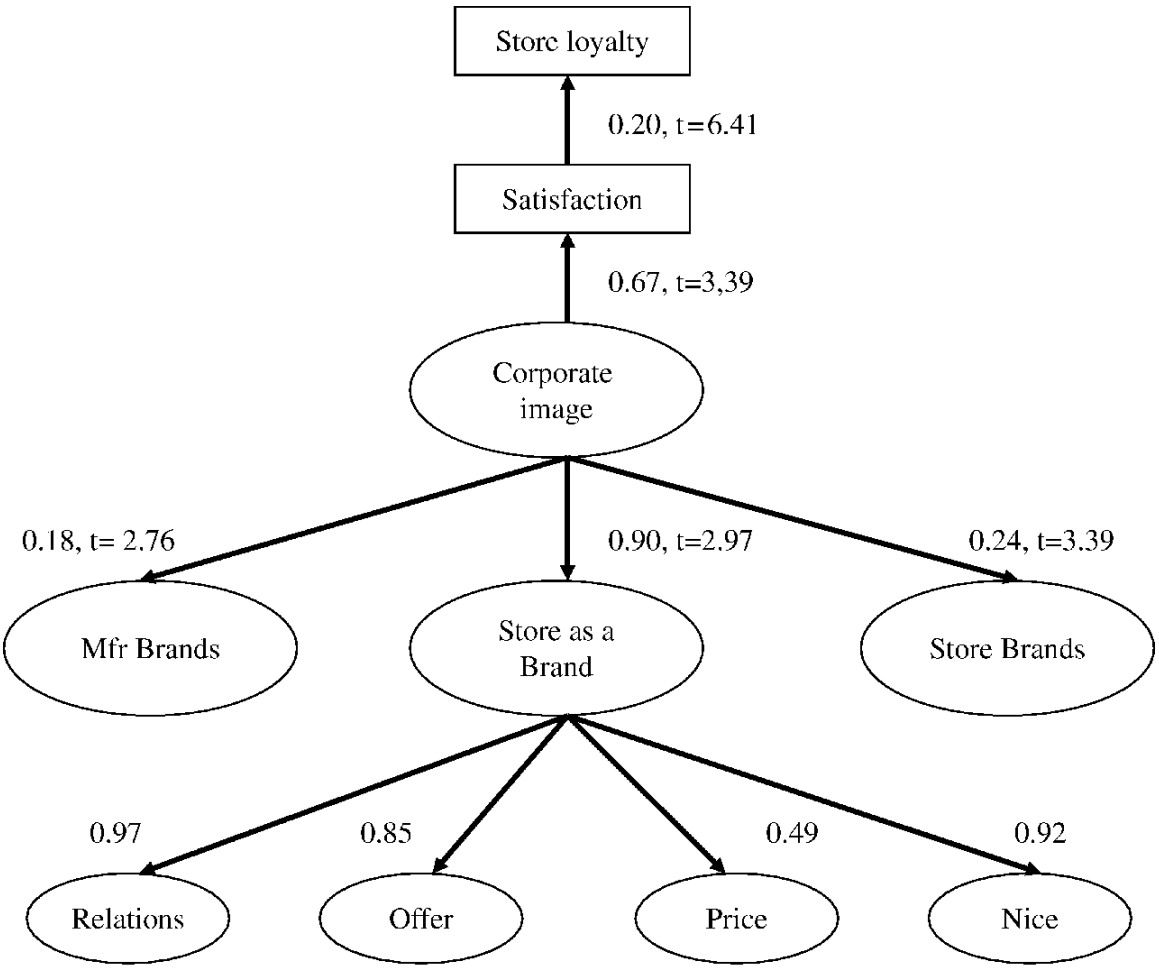
Source: Bloemer and Ruyter (1998)

Ailawadi, Pauwels et al. (2008), assessed the correlation between SB share and store loyalty for two leading chains in The Netherlands (Albert Heijn and C100). They defined store loyalty by calculating the spending in the store as a percentage of the total purchases on supermarket products (share of wallet). They also defined SB share as the household's SB spending at the store over its total spending in that store on product categories in which the store offers SBs. They found that the SB share was different between the two retailers and this was consistent with other studies (Dhar and Hoch 1997). Due to this variation the importance of estimating such relationships for each retailer separately was emphasized. They also found that there is "a reverse causality and nonlinearity in the relationship between SB and loyalty". That is, SB share significantly affected loyalty and that loyalty significantly affected SB share for both retailers.

Specifically, they find that: (a) *"consumers' general propensity to buy PLS (in other chains) has a negative effect on SOW",* (b) *"there is an inverted U-shaped effect of PL share on SOW and that retailers should know the point of SB share"*.

Finally, Martenson (2007) examined the impact of corporate store image on customer satisfaction and loyalty in grocery retailing. She confirmed the strength of the "store as a brand" concept that was previously mentioned by other researchers (Dick, Jain et al. 1996; Burt and Sparks 2002). Martenson (2007) developed a model that related the following latent variables: the store as a brand; the SB and the Manufacturer Brands to the dependent manifest variable store loyalty through the level of satisfaction with the store (see Figure 3.3). She found that from the three latent variables the store as a brand is the variable with the highest relationship to corporate image. She also found that manufacturer brands have the lowest effect since consumers expected to find them in the stores. Additionally, SBs also had a low effect indicating that consumers did not expect retailers to introduce SB. Again in this study, we see that SBs are treated as an independent variable and their impact on loyalty to the store is investigated via image and satisfaction. We know from other studies that store brand name, store prices, and promotions affect the consumer's response to products. We also know that store image and satisfaction with the store positively affect purchase intention (Grewal, Krishnan et al. 1998; Burt and Sparks 2002). So, in this study, we want to investigate the effect that the customer satisfaction might have on SBs.

Figure 3.3: The role of Store Image for Satisfaction and Loyalty



Notes: All standardized path coefficients are significant (t-values > 1.96, p < 0.05). All standardized coefficients in the measurement models are significant (t-values > 1.96, p < 0.05). Lowest t-value is 2.76 and highest t-value is 50.94. $\chi^2 = 1064.1$ (N = 1000, df = 473, p < 0.000) RMSEA .036

Source: Marteson (2007)

One observation after reviewing these five research papers is that SBs are considered by researchers as a product category rather than as separate brands, with each one having its own unique characteristics and generating consumer attitudes and perceptions. Another observation is that there are no research studies in the literature that try to analyze the relationship(s) between the

retailer's strategy, the retailer's SB management practices, and the consumer's acceptance of the retailer's SBs.

Morris (1979) found that SB penetration is not dependent upon the price differential alone but it is also affected by the strength of the manufacturer. He found that the penetration of SBs is expected to be lower in situations where the manufacturer holds a strong leading position in the market, and/or is spending heavily on advertising. Since the 1970's many things have changed. Retailers have more power; often more than the manufacturers, and their role in the channel has been enhanced. Burt (2000) provides an assessment of the evolution of the SBs in Britain. He explains that this is due to the repositioning of the SBs during the mid-1980s, from low price-low quality to high quality brand alternatives, and the successful creation of the retailer as a brand in the U.K. Ubina, Rubio et al. (2006) provide some analysis of SB management practices but from the manufacturers' perspective. So, it appears that empirical studies on the role of the retailer and specifically the retailer as a brand are underrepresented.

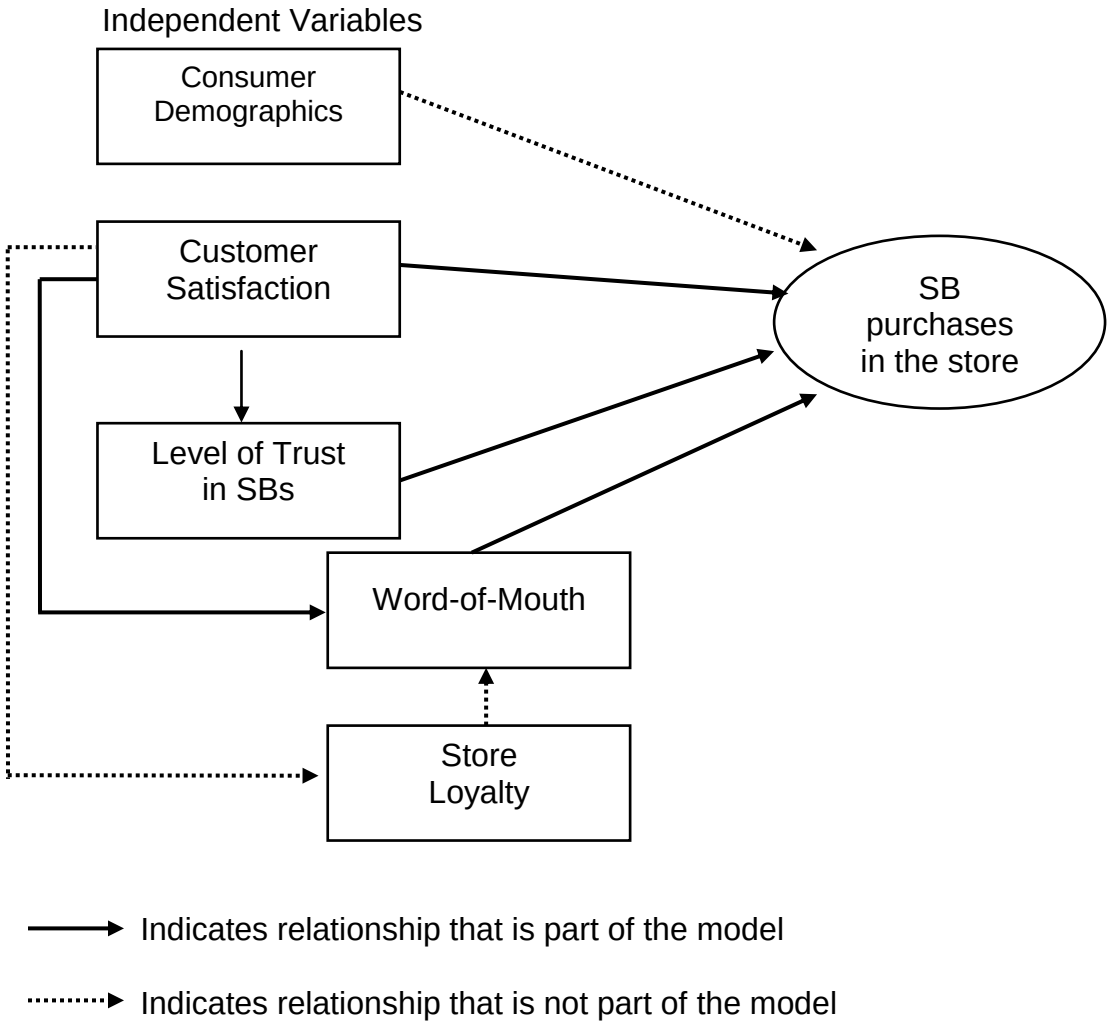
The focus of this research is therefore to assess how the retailer's overall strategy affects SB proneness. Retailers are the last institution in the channel of distribution. They are the only ones who come in direct contact with consumers, so their role should not be underestimated. Retailers have played a very important role in the growth of SBs. In this research, we will explore the link between SB purchases, the level of trust with the SBs, and the level of customer satisfaction with the store.

The above review identified research gaps that this study will attempt to address. It provides a theoretical justification for examining customer satisfaction and level of trust in the SBs as variables that influence SB purchases. In the following section, the researcher presents the conceptual model adopted for this study and describes each of the constructs prescribed in the model.

3.2 The Conceptual Model

The interrelationships of past theoretical and empirical efforts allow the researcher to propose a conceptual model of SB purchase behavior (Figure 3.4). As we can see in the figure, the following sets of constructs were incorporated into the model due to their significance in describing the reasons for adoption of SB: customer satisfaction, word-of-mouth and level of trust in SBs. So, we have one endogenous and three exogenous constructs. Customer Satisfaction with the store (CS), trust in SBs and word-of-mouth (WOM) are assumed to have a direct effect on SB purchases. Additionally, CS is shown to influence the level of trust in SB. The construct of store loyalty is considered through word-of-mouth. Finally, the construct of consumer demographics is not considered since the aim of this study is to look at behavioral issues and at differences among retailers rather than examine the consumer characteristics affecting SB purchases. The following sections will define and identify the measurements for each of the above-mentioned constructs in this study.

Figure 3.4: The Conceptual Model



3.3 The Construct of Customer Satisfaction

Many centuries ago Aristotle in his Politics stated, *"It is the nature of desire not to be satisfied, and most men live only for the gratification of it"*. The above reflects the difficulties individuals encounter in their efforts to gain satisfaction in their everyday lives, and implies that it is not possible to achieve complete satisfaction. The effort placed upon achieving satisfaction is however, fundamental for businesses, institutions, governments, and for our personal relationships.

It is generally believed that CS has a strong positive effect on financial performance and that a higher level of CS leads to better economic returns and financial performance (Anderson and Sullivan 1993; Anderson, Fornell et al. 1994; Yeung and Ennew 2000; Chiquan, Kumar et al. 2004). Specifically, Anderson, Fornell *et al.* (1994) indicate that an annual one-point increase in CS has a net present value of $7.48 million over five years for a typical firm in Sweden or a cumulative increase of 11.5% of their average net income. Yeung and Ennew (2000) suggest that there is a direct and positive relationship between CS and sales, operating income, net income, retained earnings and stock performance. Some researchers, however, support the view that the economic returns from improving CS are not immediately realized. Instead CS has a lagged effect since it takes time to develop the necessary requirements - quality control, offering improvements or customized products, etc - to achieve satisfaction (Anderson, Fornell et al. 1994; Chiquan, Kumar et al. 2004). On the other hand some studies, even though they support the existing findings that CS

increases a firm's reputation and the customers' repurchase intention, found that there is no positive relationship between CS and profitability. They claim that in order to increase CS, increases in costs are necessary which offset the gains from the higher customer revenue. So, there is a trade-off between CS and productivity (Anderson, Fornell et al. 1997; Sui-Hua 2007). Overall, the findings are not uniform across studies and industries (Szymanski and Henard 2001). There is a difference in the impact of CS on profitability between the service and the goods industry. Specifically, Anderson, Fornell *et al.* (1997), found that CS has a significant positive association with profitability in the service industry, but no significant association in the goods industry. Additionally, CS is found to have a positive impact on a retailer's image and equity (Pappu and Quester 2006).

Considering the above benefits, it is no surprise that CS has been the subject of extensive research and generated considerable debate among marketers. The focal point of the Marketing concept is to satisfy customers at a profit. So, with the emergence of the marketing concept in the mid-1950s, CS drew increased attention. It is estimated that between 1970 and 1990 more than 15,000 academic and trade articles were published on the topic which try to define, measure, and model the antecedents and outcomes of CS. Especially, during the 1980s there was a strong emphasis on CS and how to improve it (Peterson and Wilson 1992; Mittal and Kamakura 2001; Helgesen 2006). However, not all industries accepted the marketing concept at the same time. Companies in the consumer goods industry were the first, followed by the service industry. Traditional retailers have historically been slow to adopt the marketing

concept (Kotler, 2006). Since CS is a key construct in the model of this thesis, we discuss it in detail. In the following sections, we attempt to present a conceptual basis for understanding CS and its determinants. Additionally, we specify the CS definition and the operationalization of the construct in this study.

3.3.1 Defining Customer Satisfaction

The concept of satisfaction is used in many disciplines and academics have tried to define it in a number of different ways (Giese and Cote 2000). Some of the definitions characterize customer satisfaction as an outcome of the consumption experience. According to Howard and Sheth (1969, p.145) customer satisfaction is *"the buyer's cognitive state of being adequately rewarded for the sacrifices he has undergone"*. In line with this definition, Oliver (1981) based on the disconfirmation paradigm characterizes satisfaction as a more affective construct *" …the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience"*.

Customer satisfaction has also been defined as a process. One of the earliest and frequently used definitions presented by Hunt (1977, p.49) is: *"consumer satisfaction with a product refers to the favorableness of the individual's subjective evaluation of the various outcomes and experiences associated with buying it or using it"*. The process-based definitions are related to the expectancy disconfirmation model where consumers form their responses by comparing the perceived with the expected performance (Yi 1990; Rust and

Zahorik 1993; Rust and Oliver 1994). According to Rust and Oliver (1994) consumer satisfaction should be conceptualized as a fulfillment response. Oliver (1997) defined satisfaction as *"the consumer's fulfillment response, the degree to which the level of fulfillment is pleasant or unpleasant"*. Two years later, he defined CS as *"an evaluation of the perceived discrepancy between prior expectations… and the actual performance of the product"* (Oliver, 1999). Overall, satisfaction is defined as a "post-consumption" experience; consumers evaluate the product or service acquired by comparing perceived quality with expected quality (Oliver 1981; Churchill Jr and Surprenant 1982; Dick and Basu 1994; Sivadas and Baker-Prewitt 2000).

Furthermore, some researchers have conceptualized CS as either manifest or latent. Manifest customer satisfaction with the store is when there is an explicit evaluation – a comparison between expectations and performance - of the store. Latent customer satisfaction with the store is when there is an implicit evaluation of the store choice that the consumer is not fully aware of. The basis for this distinction is the degree of elaboration placed upon the evaluation of the brand by the consumer, which in turn depends on the motivation and the capacity of the consumer to evaluate the brand (Bloemer and Kasper 1995; Bloemer and de Ruyter 1998).

Another approach is to conceptualize CS as either transaction-specific or cumulative (Boulding, Kalra et al. 1993; Jones and Suh 2000). The transaction-specific approach treats satisfaction as a static evaluation derived from a single transaction. It describes CS as an outcome of an isolated consumption

experience. Thus, it may vary from one transaction to another (Bitner 1990; Cronin Jr and Taylor 1992; Gotlieb, Grewal et al. 1994). The cumulative or overall approach describes satisfaction as a process or a cumulative measure. It describes the total consumption experience with a product or service and the overall evaluation of the customer with the purchase and consumption (Fornell 1992; Anderson, Fornell et al. 1994; Spreng, MacKenzie et al. 1996; Anderson, Fornell et al. 1997; Bolton 1998; Garbarino and Johnson 1999; Auh and Johnson 2005). Overall, cumulative satisfaction is affected by the transaction-specific, and is more stable since it requires several experiences for cumulative satisfaction to change (Jones and Suh, 2000).

3.3.2 The Definition of Customer Satisfaction in this Study

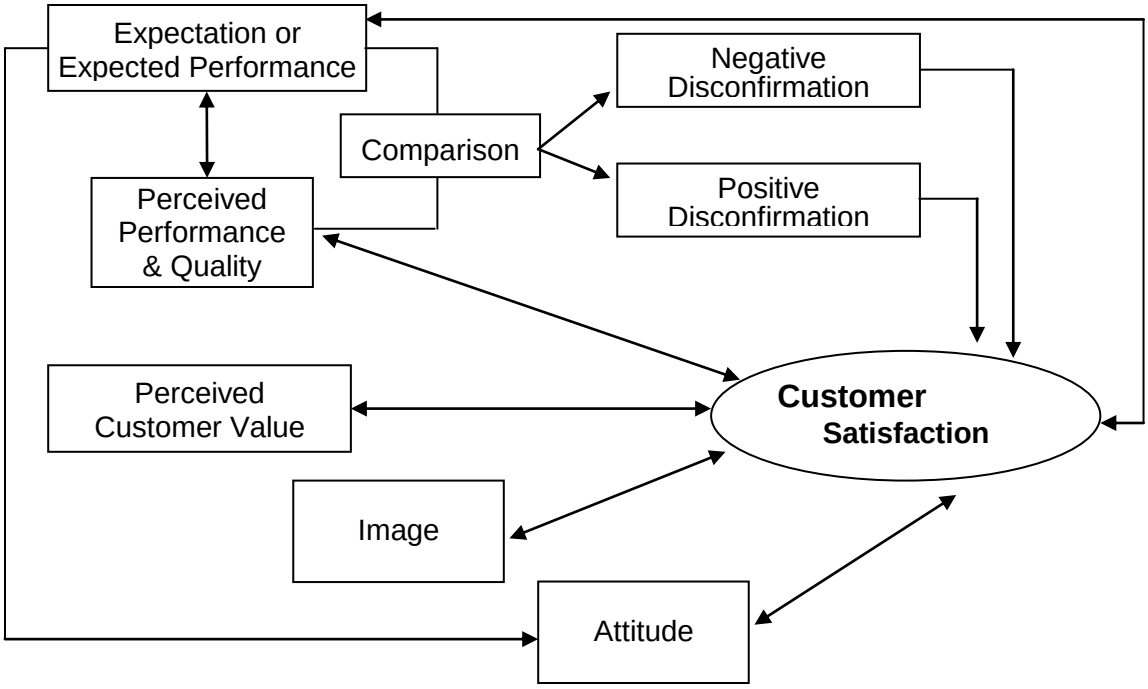
The literature review revealed that academics have not come to a generally accepted definition of customer satisfaction. The establishment of a definition is necessary for the development of the appropriate measures (Churchill Jr 1979). Giese and Cote (2000) based on commonalities found in the satisfaction literature, proposed a framework that enables researchers and practitioners to develop context-specific definitions. They conclude that consumer satisfaction is *"a summary affective response of varying intensity with a time-specific point of determination and limited duration, directed toward focal aspects of product acquisition and/or consumption".* In this section, we will identify the definition selected for the specific focus of this study, the grocery stores.

In retailing, CS is primarily linked with store satisfaction. Thus, in this study CS is defined as "*"the outcome of the subjective evaluation that the chosen alternative - the store - meets or exceeds expectations"* (Bloemer and de Ruyter 1998). Customer satisfaction is therefore conceptualized as a cumulative, post-consumption evaluation of how well a store meets or exceeds customer expectations. The outcome of this comparison will determine the level of satisfaction or dissatisfaction. This inclusive evaluation is based on experiences of the retailer over time. Thus, this definition emphasizes the evaluative process by which the response is determined rather than the construct itself. Additionally, the above definition contains the elements of evaluation and comparison, and as such they consider CS as a major outcome of marketing activity (Engel et al., 1968). Thus, CS in this study pertains to the response of the end user who is also the purchaser for the household.

3.3.3 Determinants of Customer Satisfaction

Although researchers have used different definitions for CS, they agree that CS is determined by a number of inter-related variables. These key variables are expectation or expected performance, perceived performance and quality, disconfirmation, perceived customer value, image and attitude. Figure 3.5 portrays how these variables are interrelated and whether they affect CS directly or indirectly. In the following paragraphs, these variables will be briefly described.

Figure 3.5: Determinants of Customer Satisfaction based on prior research



Source: Adopted from (Churchill Jr and Surprenant 1982; Anderson and Sullivan 1993)

Expectations or expected performance reflects customers' beliefs or attitudes of what "will" happen and/or what "should" happen in their next purchase. Expectations are formulated through prior experience with the product. They can also be formulated prior to the purchase from knowledge acquired through word of mouth, publicity, opinion leaders, and through all elements of the product's marketing mix (Oliver 1980; Boulding, Kalra et al. 1993). Most researchers agree that expectations have an indirect influence on CS, and that this relationship can be either positive or negative. It can be positive because by increasing expectations, we also increase the perceived product performance and through that we achieve higher CS. On the other hand, it can be negative because by increasing expectations we may increase

disconfirmation with a negative impact on CS (Yi 1990; Spreng and Mackoy 1996). Moreover, few researchers identified a direct influence of expectations on satisfaction levels (Oliver and DeSarbo 1988).

Perceived performance and quality is another variable that has both a direct and an indirect influence of CS. Perceived quality is defined as the consumer's judgment about a product's overall excellence or superiority (Zeithaml 1988). Researchers have found a direct positive relationship between perceived performance and CS (Churchill Jr and Surprenant 1982; Cronin Jr and Taylor 1992; Selnes 1993; Sivadas and Baker-Prewitt 2000; Gomez, McLaughlin et al. 2004). In Sweden, Anderson, Fornell et al. (1994) found that both perceived quality and expectations have a positive impact on CS with quality having a greater impact. Perceived performance and quality also has an indirect effect on CS through its influence on disconfirmation (Oliver 1980; Anderson and Sullivan 1993). Perceived quality is positively affected by expectations and this is indicated in Figure 3.6 (Anderson 1973).

Disconfirmation occurs only after customers have tried the product or service and is the outcome of the comparison between expectations and perceived performance. The outcome of this comparison can be (a) confirmation of an individual's expectations, when a product performs as expected and thus has no influence on CS or (b) negative disconfirmation of an individual's expectations, when product performance is below the expectations and thus has a negative influence on CS or (c) positive disconfirmation, when product performance exceeds expectations and thus has a positive influence on CS. So,

the disconfirmation variable predicts that CS will increase as perceived performance increases, and will decrease as expectations become higher (Oliver 1980; Oliver and DeSarbo 1988; Yi 1990; Anderson and Sullivan 1993; Spreng and Mackoy 1996). There is an agreement among researchers that disconfirmation has a direct influence on CS. Some claim that this is the single most important variable in the process since it produces the greatest impact on satisfaction (Oliver 1980; Churchill Jr and Surprenant 1982; Szymanski and Henard 2001). Others find disconfirmation and perceived quality to have a stronger impact on satisfaction than expectations (Oliver and DeSarbo 1988).

Regarding the relationship between perceived customer value and satisfaction there is disagreement among researchers upon the direction of this relationship. Some believe that CS is a determinant of customer value (Bolton and Drew 1991) whilst others argue that customer value determines CS (Jones and Sasser Jr 1995; Fornell, Johnson et al. 1996; Cronin Jr, Brady et al. 2000; Gomez, McLaughlin et al. 2004). Perceived customer value is defined as the difference between the prospective customer's evaluation of all the benefits derived from a product and all the costs of acquiring those benefits (Kotler and Keller 2006). Perceived customer value differs among consumers. Zeithaml (1988) grouped the patterns of responses provided by consumers into four "meanings" of value: value is low price; value is whatever I want in a product; value is the quality I get for the price I pay; and value is what I get for what I give. Considering these diverse meanings of value, he defined perceived customer value as *"the consumer's overall evaluation assessment of the utility of a product*

based on perceptions of what is received and what is given". Furthermore, he indicated that perceived customer value affects perceived quality (Zeithaml, 1988). However, from the above discussion, we can infer that a product with high-perceived quality will not necessarily provide high customer value and vice versa - low perceived quality will not necessarily provide low customer value. This is because not all consumers want to buy the highest quality product in every category. It was indicated though that perceived customer value affects the relationship between perceived quality and purchase intention. However, CS mediates this relationship (Zeithaml 1988; Wahyuningsih and Tanamal 2008).

Considering all these determinants of satisfaction there are some questions that need to be answered: are there any differences among consumers? Do satisfaction ratings vary on the basis of consumer characteristics? It was found that not all consumers respond equally to increases in satisfaction and that consumers with different characteristics have different thresholds. So, for the same rated level of satisfaction their responses might be different or consumers may provide different ratings. For instance, women tend to designate higher satisfaction ratings than men, along with older people. This possibly means that different consumers are using different standards for comparison or that some consumers are easier to please than others (Peterson and Wilson 1992; Bryant and Cha 1996; Mittal and Kamakura 2001).

Other questions are related to the type of variables and the level of importance attached to each variable. So, is customer satisfaction being determined by the same variables across different product categories? Do all

variables have the same weight? Churchill and Surprenant (1982) and Yi (1990) indicated that the determinants of satisfaction are different for different product classes. Specifically, they found that satisfaction in durables and in high involvement products is determined by product performance. While in non-durables a combination of expectations, disconfirmation and performance explains variations in satisfaction. A few years later, Yi (1993) stated that the CS process is different across product categories and that product ambiguity affects the contribution of the above-mentioned variables to satisfaction. He indicated that when products are difficult to evaluate (ambiguous) consumer expectation has a higher effect on CS than perceived performance, in contrast when products are easy to evaluate (unambiguous) perceived performance has a higher effect on CS than expectation.

3.3.4 Measuring Customer Satisfaction in this study

The importance of CS as one of the outputs of marketing strategy is unquestionable, and the more competitive the market the more important it is to maintain a high level of CS (Jones and Sasser Jr 1995; Gomez, McLaughlin et al. 2004). Some marketers (e.g. Kotler and Keller, 2006) consider CS as the best indicator of a company's profitability. So, countries, industries, and individual companies, are trying to measure and track CS and then use the ratings to evaluate performance of different business units, of different levels – region, territory, employee - of the organizational structure and of different management practices – training, motivation, compensation - within the organization.

In 1989 Sweden became the first country to introduce a national economic indicator for CS. The Swedish Customer Satisfaction Barometer (SCSB) is an annual index that measures CS in 30 industries and for more than 100 corporations. In 1994, we had the development of the American Customer Satisfaction Index (ACSI). The ACSI is a similar index to the SCSB. It measures overall CS in the U.S on a national level. Based on the experience from Sweden and U.S, a European Customer Satisfaction Index (ECSI) was introduced. In 1999 a pilot study was conducted in 12 European countries aimed at measuring CS and loyalty in European retailing. Overall, these indices measure CS on a macroeconomic level and they provide valuable information on how customers perceive the quality of products and services in a whole industry (Fornell 1992; Fornell, Johnson et al. 1996; Kristensen, Juhl et al. 2001).

In measuring CS, we need to determine the type of satisfaction that we are referring to. Is it transaction-specific or cumulative? Is it manifest or latent? We also need to determine whether we are measuring satisfaction with a product, an attribute, a consumption experience, a purchase decision, and/or pre-purchase experience with the store or the salesperson (Yi, 1990). Also, we need to determine how we will measure it; what items and what number of items we will use; what type of scale we will use etc.

We can measure CS directly by simply asking consumers or indirectly by collecting data on consumer complaints and or repeat purchases. Each method has different strengths and weaknesses. The major disadvantages of the indirect measurement method are: (a) it is a post-hoc approach and thus does not

provide the opportunity to adjust the marketing strategy and to fix the problem in time, (b) it indicates a possible sales increase or decline but not the reasons for these fluctuations (Bloemer and Poiesz 1989). Due to these disadvantages the direct survey methods are the most commonly used, and the indirect measures are typically seen as complementary (Bloemer and Poiesz 1989; Yi 1990; Peterson and Wilson 1992). In terms of measurement scales, there are three categories. The performance scales such as “poor”, “fair”, “good” and “excellent”; the disconfirmation scales such as “worse than expected” to “better than expected”; and the satisfaction scales such as “very satisfied” to “very dissatisfied” (Danaher and Haddrell 1996). In terms of the number of items, customer satisfaction surveys use either the single-item or the multi-item scale. In a single-item scale respondents are asked to rate their level of satisfaction or dissatisfaction, from “very satisfied” to “very dissatisfied”, using a scale usually of four to seven points. Single-item scales are used because of their simplicity but they lack validity and reliability and fail to capture the multidimensionality of the CS concept (Yi, 1990). Danaher and Haddrell (1996) reported that in a multi-item scale, “*survey respondents are not asked to give an overall evaluation of their satisfaction with the service but are also asked to rate the key components of the service process*”. Studies show that using multi-item scales provide more reliable measurements of CS. Recent studies tend to use multi-item scales to measure CS (Danaher and Haddrell, 1996; Yi, 1990). Westbrook and Oliver (1981) found that among the different multi-item scales, the semantic differential and the Likert scale have the highest reliability.

Managers must try to achieve a high level of CS and then maintain it. Oliver (1981) suggests that retailers have a greater need for CS programs than manufacturers because of their unique position in the distribution channel. Retailers act both as sellers and as service providers and come into direct contact with consumers; they are the first recipients of customer complaints and the first to be blamed when things go wrong. So, they need to measure their customers' overall satisfaction and in order to do that they have to identify the determinants of CS in their specific retail context. They must try to identify the attributes that are maintaining, and those that are enhancing, CS. Specifically, they need to identify the important product quality attributes, measure the degree of satisfaction with each attribute, determine the weight of each attribute and then compile their overall CS score. In retailing these attributes are related to the store. It was found that each store type - food discounters versus full-service retailers - has a different set of attributes (Hansen and Deutscher 1977; Mitchell and Kiral 1998). So, in order to increase CS in an efficient way, retailers must identify the attributes for their type of store and then invest in the improvement of the satisfaction enhancing attributes (Gomez, McLaughlin et al. 2004).

As CS is a complex construct and consists of many components, it was decided to use multi-item measures to capture the different dimensions of CS. It was believed that with multi-item measures one could more accurately describe the various dimensions from which CS is derived and thus provide a more accurate and managerially actionable measure. The literature review has revealed a direct positive relationship between perceived quality and CS

(Churchill Jr and Surprenant 1982; Cronin Jr and Taylor 1992; Selnes 1993; Sivadas and Baker-Prewitt 2000; McGoldrick 2002; Gomez, McLaughlin et al. 2004). CS is measured through thirteen specific and measurable attributes that were expected to influence overall customer satisfaction with the store, see Table 3.1. These multiple measures are grouped into three satisfaction factors to accommodate commonality and to minimize multicollinearity. The three service quality dimensions identified by Rust and Oliver (1994) were used to group the thirteen measures into three satisfaction factors. These satisfaction factors (latent variables), and their definition, were as follows: (a) the Service Environment, the influence of the service environment in the formation of service quality perceptions, (b) the Service Delivery, the "how" it is being offered, the functional quality, the customer-employee interaction and (c) the Service Product, the "what" is being offered, the technical quality. The primary research will collect consumer ratings of these attributes, and overall CS is modeled as a linear function of these latent variables (Bolton and Drew 1991; Fornell, Johnson et al. 1996; Gomez, McLaughlin et al. 2004). Evaluation is based on experiences with the retailer over time.

In terms of the scale, the satisfaction scale was selected. Consumers were asked to provide their ratings from "very satisfied" to "not at all" using a four-point scale (see section 4.4.1 for the justification of the scale). It should be noted that these measures express *customer perceptions* and according to Dabholar, Shepherd and Thorpe (2000) perception measures are superior to

computed disconfirmation and perform better than measured disconfirmation (Dabholkar, Shepherd et al. 2000).

Table 3.1: Customer Satisfaction measurements

#	Specific attributes	Satisfaction factors
1	The cleanliness of the space	Service Environment
2	The signs on the aisles of the store	
3	The music inside the store	
4	Available employees for help/service	Service Delivery
5	The prices are visible on the shelves	
6	The prices are the same on the shelves and at the cashier	
7	Frequency of expired products	
8	Frequency of out of stocks	
9	The size of the store	Service Product
10	The distance from the house/work	
11	The parking	
12	Level of satisfaction with the width	
13	Level of satisfaction with the depth	

To summarize, cumulative customer satisfaction with the identified grocery store was measured by directly asking those responsible for household purchases. CS was conceptualized as a latent variable and thirteen attributes grouped into three satisfaction factors were used to measure the respondents overall CS with their primary grocery store.

3.4 The Construct of Loyalty

In the previous section it was mentioned that due to the undeniable importance of CS, companies devote many resources to achieving good CS. During the 1970s and 1980s there was an emphasis amongst researchers on CS and how to

achieve higher levels of satisfaction. But how is this possible? Henry George, the US economist, said, *"man is the only animal whose desires increase as they are fed; the only animal that is never satisfied"*. During the 1990s, it became apparent that CS alone is not enough to secure repurchase, to achieve profitability and to gain a competitive advantage. Instead, it was realized that CS is rather the means to achieve customer retention and loyalty (Bloemer and Kasper 1995; Jones and Sasser Jr 1995; Reicheld 1996; Oliver 1999; Miranda, Konya et al. 2005).

The importance of loyalty to businesses and specifically to retail businesses is unquestionable (Sirohi, McLaughlin et al. 1998; Oliver 1999). Many researchers have proved a positive relationship between customer loyalty and profitability (Reichheld and Sasser Jr 1990; Hallowell 1996). Specifically, Reichheld and Sasser (1990) found that when a company retains 5% of its customers, profits increase by 25% to 125%. Even though the construct of loyalty is not directly considered in our model, we will elaborate on the concept mainly because of its importance and its relationship with customer satisfaction and word-of-mouth. In this section, we will briefly define loyalty and its determinants.

3.4.1 Defining and Measuring Loyalty

The concept of customer loyalty dates back in 1952 when George H. Brown first introduced it in a series of articles in Advertising Age (McConnell 1968). During

the following decades many researchers have thoroughly investigated the concept and its importance in strategic marketing planning.

Comparing the concept of loyalty with the concepts of image and satisfaction, it seems that there is less disagreement amongst researchers over the definition of loyalty. Loyalty is an attitude and it remains to be agreed about the type or types of attitudes that should be incorporated into the definition.

The marketing literature suggests that there are three approaches to define and subsequently measure loyalty. One approach views loyalty as an affective attitude, the other as a behavioral attitude, and the third defines loyalty as a combination of the two (Laaksonen, 1993). The affective approach identifies loyalty through consumers' intention: to repurchase a product; to purchase more in the future; and to recommend the store to others (Oliver 1980; Fornell 1992; Anderson and Sullivan 1993; Zeithaml, Berry et al. 1996; Sirohi, McLaughlin et al. 1998). Cronin and Taylor (1992) used a single-item purchase intention measure, asking respondents to indicate their intention to use XYZ during the next year. Since this approach measures respondents' intentions rather than their actual behavior, the inherent problem with this approach is that we cannot assume intentions will necessarily lead to actual behavior (Morwitz and Schmittlein 1992; Bolton, Kannan et al. 2000). In contrast, the behavioral definitions identify loyal customers based on their actual purchases. One of the first proponents of this approach was Cunningham. He defined brand loyal customers as those that allocate at least 50 percent of their purchases to a specific brand (Cunningham 1956). In line with the behavioral approach, Tucker

(1964, p.32) defined brand loyalty as "*a biased choice behavior with respect to branded merchandise*". He expressed brand loyalty in terms of the frequency that a consumer chooses one brand over another. He used as a criterion the number of consecutive purchases (three or four) made of the same brand. Most of these definitions are predominantly operational and the definition also identifies the way to measure loyalty.

Day (1969) criticized these definitions and measures as too limited since they do not distinguish between true and "spurious" brand loyalty. Jacoby and Kyner (1973) supported his criticism and claimed that a behaviorally based definition of brand loyalty may lead us to confuse brand loyalty with repeat purchases and it does not provide us with any consideration whatsoever on the reasons of the behavior. They conceptualized brand loyalty by the following six conditions: (1) the decision is biased, (2) a purchase is made, (3) there is repetition of purchase, (4) the decision may involve more than one person, (5) there is a selection of one or more brands out of a set of brands and (6) is a decision making process in which various brands are being evaluated on certain criteria until the most preferred brand is selected. Furthermore, there are many studies that approach loyalty as an emotional and psychological bond or as a commitment to the brand (Bloemer and Poiesz 1989; Bloemer and Kasper 1995). Overall, researchers have argued that loyalty should be defined and measured as a combination of both affective and behavioral attitude (Day 1969; Dick and Basu 1994). Oliver (1999, p.34) is a proponent of this third approach that emphasizes both aspects of loyalty. He defined loyalty as

> *"…a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or dame brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior"*.

In this study, we define loyalty to a store using Bloemer and de Ruyter's (1998, p.500) suggestion that store loyalty is *"the biased (i.e. non random) behavioral response (i.e. revisit), expressed over time, by some decision-making unit with respect to one store out of a set of stores, which is a function of psychological (decision making and evaluative) processes resulting in brand commitment".* Thus, loyalty to a store leads to store commitment; Bloemer and de Ruyter's (1998) defined store commitment as *"the pledging or binding of an individual to his/her store choice"*.

In this study, commitment to the store, and thus store loyalty is measured using a combination of repeat purchases from the store and the intention to recommend the store to others. Thus, we accept Bloemer and de Ruyter's (1998) view that since the level of commitment can be different, there is a continuum of store loyalty. At one end of the continuum, we have the true store loyal customers that keep visiting the store, undertake most of their grocery shopping in that store and also recommend the store to others. At the other end of the continuum, we have the spurious store loyal customers that keep visiting the store, but are not committed to it, since they are not willing to recommend it to others. In support of this approach, Court, Elzinga et al. (2009) identified two types of loyalty, the active loyalists and the passive loyalists. The active loyalists are those consumers who not only repeatedly purchase the brand but also

recommend it. The passive loyalists keep purchasing the brand but they are not committed to it.

3.4.2 Determinants of Store Loyalty

Researchers agree that satisfaction is the most important determinant of loyalty and that there is a direct relationship between the two constructs (Bitner 1990; Fornell, Johnson et al. 1996; Mittal and Kamakura 2001). There is disagreement though about the nature of the relationship. Some found that there is a positive relationship, and that the higher the CS the higher the loyalty of customers (Cronin Jr and Taylor 1992; Fornell, Johnson et al. 1996; Bloemer and de Ruyter 1998; Oliver 1999; Mittal and Kamakura 2001; Olsen 2002; Helgesen 2006). Others have argued that satisfaction is a necessary, but not sufficient, condition leading to loyalty or repeat purchase (Bloemer and Kasper 1995; Jones and Sasser Jr 1995; Gale 1997). While other researchers found that CS does not influence loyalty. Sivadas and Baker-Prewitt (2000) conducted a study of department store shoppers and found that satisfied customers will not necessary become store loyal customers. Miranda, Konya and Havrila (2005) confirmed the above finding. In a study of grocery shoppers, they tested 12 variables related to shopping patterns, and 17 variables related to store attributes. They found that the variables that influenced store satisfaction were different from those that influenced store loyalty. Some possible reasons for the mixed results might be that each study defined satisfaction and/or loyalty differently or that the studies used different types of products or different types of retailers. Pappu and

Quester (2006) concluded that the impact of CS on retail loyalty might be retailer-category specific. Another reason might be that some studies underestimate the strength of CS. Researchers identified the level and strength of CS as facilitators to the link between loyalty and CS, and that only strongly held satisfaction would be translated into loyalty (Jones and Sasser Jr 1995; Helgesen 2006; Chandrashekaran, Rotte et al. 2007). A study at Xerox corporation revealed that their *"totally satisfied customers were six times more likely to repurchase products over the next eighteen months than its satisfied customers"* (Reichheld and Sasser Jr 1990). Jones and Sasser (1995) studied this relationship in the following five markets: automobiles; personal computers for businesses; hospitals; airlines; and local telephone services. Their study confirmed this relationship in all markets except that of local telephone services. So, they concluded that, especially in highly competitive markets, it is the completely satisfied customer that determines loyalty.

3.5 The Construct of Word-of-Mouth

Word of mouth (WOM) is one of the earliest and most primitive ways of communication and its importance is widely acknowledged. Research indicates that WOM communication has a significant effect on consumer decision-making (Bayus 1985; Herr, Kardes et al. 1991; Duan, Gu et al. 2008; Court, Elzinga et al. 2009). Specifically, Bughin, Doogan and Vetvik (2010) indicate that 20 to 50 percent of all purchasing decisions are influenced by WOM and that the influence

is greater when consumers are faced with an extended problem-solving situation. WOM can affect the overall consumer beliefs, preferences and habits for either a particular product category or for the selection of one brand over another (East, Hammond et al. 2008).

Originally WOM was used to describe oral communication, but now includes other types of human communication, such as e-mail and text messaging. With the increasing use of the Internet, WOM has become even more powerful. Consumers with tools such as Facebook, YouTube, MySpace, etc. can disseminate information easier, faster and on a much larger scale (Dellarocas 2003; Duan, Gu et al. 2008).

The importance of WOM appears to be higher in the marketing of services. In services, the decision making process is more complicated. Consumers have to evaluate both tangible and intangible dimensions (Gronroos 1984), so in order to reduce perceived risk and uncertainty, consumers rely more on WOM (Murray 1991). In the following sections, we will present a conceptual basis for understanding and measuring WOM along with the factors that trigger WOM.

3.5.1 Defining and Measuring Word-of-Mouth

There is agreement amongst researchers that WOM is an unpaid form of interpersonal communication. The American Marketing Association defines it as *"sharing information about a product, promotion, etc. between a consumer and a friend, colleague or other acquaintance"*. In this study, we define WOM

fundamentally using the perspective of East, Hammond and Lomax (2008). They defined WOM as an *"informal advice passed between consumers. It is usually interactive, swift, and lacking in commercial bias"*.

As we can see form the above definitions, WOM is used to describe advice from one consumer to another. So, WOM can be expressed as being either positive (PWOM) or negative (NWOM). Research indicates that for those brands that consumers are familiar with, PWOM is more common since it occurs approximately three times as often as NWOM and has a greater impact in the purchase decision than NWOM (East, Hammond et al. 2007; East and Uncles 2008). In the study conducted by East, Hammond and Wright (2007), it was found that respondents are more likely to provide PWOM for their main brand. Specifically, from the total WOM for their main brand 80% was PWOM and 20% NWOM. Furthermore, researchers consider PWOM as an indication of commitment and thus it is often used to measure brand loyalty (Zeithaml, Berry et al. 1996; Court, Elzinga et al. 2009).

The literature review revealed that the methods for measuring WOM could be based on recall or on introspection/intention. Specifically, there are four ways for measuring WOM: (a) asking respondents to recall the number of times they received a recommendation or advice from someone, (b) asking respondents to recall the number of times they gave a positive or a negative recommendation, (c) asking respondents to identify their intention to recommend or not to others, and (d) using multiple-item measures (East, Hammond et al. 2007). A major drawback of the recall method is that respondents might not be able to recall the

precise number of times they either received or gave a recommendation. Additionally, measurement might be biased towards PWOM (Mangold and Miller 1999; East, Hammond et al. 2007). East et al. (2008) found that respondents reporting on hypothetical WOM impact gave results that were broadly consistent with recalled impact.

In this study, the conditional intention to operationalize WOM is used. The WOM concept is well defined and easy to understand so a single-item measure is appropriate (East and Uncles 2008). That is, WOM is measured by asking respondents their intention to recommend the specific retailer to others. Since this measurement is not dependent on recall, it will not be affected by measurement bias (East, Hammond et al. 2007).

3.5.2 Determinants of Word-of-Mouth

The literature review revealed several factors that determine the intensity of WOM, its direction (positive or negative) as well as its impact. These are the perceptions of the consumption experience, the environment, the sender, the message, and the marketing activities (Bone 1992; East, Hammond et al. 2008; Bughin, Doogan et al. 2010).

The perceptions of the consumption experience mainly refer to such factors as satisfaction, perceived service quality, perceived novelty and trust. In this case, WOM is considered as an outcome of the consumption process, based on which consumers form their perceptions and therefore the corresponding direction of WOM. Many researchers consider customer satisfaction as the main

determinant of WOM. They declare that PWOM is stimulated by satisfaction and NWOM by dissatisfaction (Richins 1983; Zeithaml, Berry et al. 1996; Ranaweera and Prabhu 2003). According to Jones and Sasser (1995), customers at both ends of the satisfaction scale tend to have intense feelings and they tend to tell others; those who have strong positive feelings are the “apostles” while those with strong negative feelings are the “terrorists”. As far as perceived service quality is concerned we find a positive and significant relationship between customers’ perceived service quality and their willingness to recommend the company or the brand (Parasuraman, Zeithaml et al. 1988; Boulding, Kalra et al. 1993). Trust has also been found to determine WOM mostly through satisfaction (Ranaweera and Prabhu 2003). Furthermore, if the consumption experience is perceived as novel, consumers are more likely to allocate more attention and time, and thus become more susceptible to WOM practices (Bone 1992). Overall perception factors determine the intensity and the direction of WOM.

The power of the message that is transmitted through WOM and its impact are determined by: the environment under which the message is passed, the relationship between the sender and the receiver, and the message itself. Messages passed within small groups have a higher impact. This is possibly due to the strength of the relationships that can be developed within small groups. Also, the receiver must trust the sender: the source of the message must be trusted in order to be influential. Furthermore, the strength of the message and the way it is expressed might also affect the impact of WOM. The content of the message must address important product or service features for the receiver to

pay attention. For example, if the WOM message is about the receiver's main brand, PWOM is more acceptable than NWOM (Bone 1992; East, Hammond et al. 2008; Bughin, Doogan et al. 2010).

Marketing efforts can also determine WOM by stimulating PWOM or hindering NWOM. Other forms of communication, such as advertising and personal selling, can stimulate PWOM by triggering the need for more information or by encouraging existing customers to recommend the product or service (Bayus 1985).

The importance of WOM to the integrated marketing communications program as well as to the overall marketing program is undeniable. Consequently in managing WOM, it is essential for practitioners to understand the factors that initiate and trigger WOM, to enable them to raise the effectiveness and efficiency of their communication programs.

3.6 The Construct of Brand Trust

Trust is recognized as an important variable that affects human relationships at all levels. Therefore, it has received a lot of attention in disciplines such as psychology, sociology, economics, management, and marketing. Trust is recognized as being broad and diverse in nature (Doney and Cannon 1997). In marketing, we have witnessed a shift from the traditional activities of *"attracting customers"* towards *"building relationships"* with customers (Gronroos 1984). Trust is considered as a key element of the relationship marketing approach: a

prerequisite for building long-term relationships between the company and its customers, intermediaries, and suppliers as well as all other members in its micro-environment (Gronroos 1984; Dwyer, Schurr et al. 1987; Morgan and Hunt 1994). When we are referring to trust towards a brand then the construct of trust becomes part of the brand-consumer relationship and therefore part of the brand equity (Ambler 1997). There are several studies that emphasize the existence of different levels of consumer commitment or loyalty with the brand (Day 1969; Jacoby and Kyner 1973). Brand trust is one of the strongest commitments since it creates a highly valued brand-consumer relationship (Morgan and Hunt 1994). Furthermore, brand trust will influence the intention to continue purchasing the brand and thus gain higher market share and it will also influence attitudinal loyalty and thus brand financial performance (Chaudhuri and Holbrook 2001).

3.6.1 Defining and Measuring Brand Trust

Most of the studies in the management and marketing literature are mainly focused on the technical or competence nature of trust rather than the motivational dimension that is used in the psychology area. In the business field motivation is not enough to deliver expected outcomes. So, researchers who declare trustworthiness have used terms such as "*reliability"* (Morgan and Hunt 1994), "*credibility*" (Doney and Cannon 1997) as well as "*ability*" (Mayer, Davis et al. 1995). These studies, even though they acknowledge that there are different conditions that lead to trust, share the belief that the partner must have the required expertise to deliver the promises.

One of the most accepted definitions of trust in the marketing literature is that suggested by Moorman, Zaltman and Deshpande (1992, p.315): *"…a willingness to rely on an exchange partner in whom one has confidence"*. This definition encompasses the two general approaches to trust found in the literature. First it views trust *"…as a belief, confidence or expectation about an exchange partner's trustworthiness that results from the partner's expertise, reliability or intentionality"*. Secondly, it views trust *"…as a behavioral intention or behavior that reflects a reliance on a partner and involves vulnerability and uncertainty on the part of the trustor"*. They argue that both belief and behavioral intention components must be present for trust to exist (Moorman, Zaltman et al. 1992; Moorman, Deshpande et al. 1993). Other researchers emphasize the cognitive or evaluative dimension of trust. In line with this approach, Morgan and Hunt (1994) defined trust as *"…when one party has confidence in an exchange partner's reliability and integrity"*. Both definitions stress the need for confidence and reliability to the trustee. However, Morgan and Hunt's definition does not integrate the behavioral intention of "*willingness*". They suggest that it is redundant to use such a specification since willingness always follows confidence, and therefore is implicit in the conceptualization of trust. Fundamentally they view trust as an attitude and suggest that the trusting intentions and behaviors should be modeled as attitudinal outcomes (Morgan and Hunt 1994).

Drawing from the trust literature, Chaudhuri and Holbrook (2001) and Delgado-Ballester and Munuera-Aleman (2001) provide specific definitions for

trust in a brand. Chaudhuri and Holbrook (2001, p.82) defined brand trust as *"…the willingness of the average consumer to rely on the ability of the brand to perform its stated function"*. Delgado-Ballester and Munuera-Aleman (2001, p.1242) defined brand trust as *"…a feeling of security held by the consumer that the brand will meet his/her consumption expectations…brand reliability and brand intentions towards the individual"*.

In this study, brand trust is defined as primarily using the perspective of Delgado-Ballester and Munuera-Aleman (2001). We consider that their definition incorporates the two most important dimensions of trust. First, the dimension of reliability is based on the belief that the brand will fulfill its promises. Secondly, the dimension of intentionality (or benevolence) is based on the belief that the brand will not take advantage of the consumer's vulnerability and uncertainty. Moorman, Deshpande and Zaltman (1993) suggest that both dimensions are necessary for trust to exist. For instance, a consumer might believe that a brand is trustworthy but is not willing to rely on the brand or to purchase the brand. In another case, a consumer relies on the brand or purchases the brand but does not believe that the brand is trustworthy. The first case indicates limited trust while the other indicates power and control by the brand rather than trust (Moorman, Deshpande et al. 1993).

We measure brand trust in global terms without an attribute specification. Thus, we measure the level of trust in SBs by a single item using a four-point ("do not trust at all" to "trust a lot") scale (Selnes 1998). Singh and Sirdeshmukh (2000) argue that measuring overall trust without any attribute specification may

be problematic because consumers do not use the same attributes to judge trust. Consumers may provide equal scores for brand trust but for different reasons. From the other hand a more precise specification conceptualizing trust with many attributes may be cumbersome. Drawing from the literature review, we argue that both benevolence and especially reliability are embedded in the consumers' perceptions of brand trust. For example, Parasuraman, Zeithaml and Berry (1985, p.47) suggest that perceived service quality is determined by both competence and benevolence perceptions: *"the consumer's comparison of expected service with perceived service"*. So, although it seems that there is a preference in marketing for multidimensional conceptualization of trust, we consider trust as a unidimensional construct. Therefore, we asked respondents to evaluate on a four-point scale to what degree they trust SBs ("do not trust at all" to "trust a lot").

3.6.2 Determinants of Brand Trust

The review has revealed that overall trust is an outcome of specific actions rather than an action itself. Based on the notion that the elements of trust are somehow also its antecedents, and that both are developed in parallel so that they influence the level of trust in either a positive or negative way (Ambler 1997). Elements of trust such as reliability, integrity (Morgan and Hunt 1994), and length of the relationship (Doney and Cannon 1997) are also considered to be determinants of brand trust.

Brand trust is a state of being that develops over time. Ambler (1997) indicates that trust *"…does not have a linear, symmetric relationship with volume sales. Trust builds slowly with sales if customers are fully satisfied*". So, satisfaction is a major determinant of trust. Delgado-Ballester and Munuera-Aleman (2001) have concluded that the higher the satisfaction with a brand the more the consumer will trust that brand.

3.7 Hypotheses

Based on the literature review and gaps in the existing literature, the theoretical proposition for this thesis is that customer satisfaction with the store, trust in store brands and word-of-mouth affect SB purchases. The following research hypotheses were conducted for this study.

3.7.1 Relationship between Customer Satisfaction, SB Trust and SB Purchases

Despite the fact that CS and SBs are considered to be very important elements in the development of grocery store marketing strategy, their inter-relationships as well as the directionality of this relationship has not received much research effort and attention.

Satisfaction is believed to influence consumers' intention to buy the product or service again (Cronin Jr and Taylor 1992; Anderson and Sullivan 1993; Shin and Elliott 1998; Gustafsson, Johnson et al. 2005). So, with the law of effect the probability of repeat purchase of a brand should increase if the

customer was satisfied with the purchase and decrease if he or she was dissatisfied. Jones and Suh (2000) tried to investigate the impact of transaction-specific satisfaction and overall satisfaction on repurchase intention. They found that even though both types of satisfaction influence repurchase intentions, overall satisfaction is a better predictor. Transaction-specific satisfaction has a stronger impact on repurchase intentions only when overall satisfaction is low. Furthermore, considering the effect of CS on market share, there is no agreement amongst researchers as to whether improvement in market share can be considered as an outcome of CS. Generally, those that are in favor of offensive marketing claim that there is no link between market share and CS; those that are in favor of defensive marketing believe that CS increases market share. In defensive marketing, repurchase and retention rates are the most important determinants of market share. These authors claim that since CS increases repurchase, it also increases market share (Rust and Zahorik 1993).

As far as SB purchases are concerned, consumers – in their decision making process - compare the perceived customer value offered by SB to that offered by NB. They aim to maximize the value obtained from their purchases. For that reason, they are comparing what they receive in terms of benefits to what they have to give away in terms of cost. SBs because of their lower price have an advantage on one of the parameters of the customer value equation. Consequently, in this research, we will focus our attention on the other parameter of the equation. Perceived benefits affect the overall evaluation and as such the decision making process. Overall, the lower price of SBs and the perceived risk

associated with SB purchases affect the level of SB trial and adoption (Livesey and Lennon 1978; Richardson, Jain et al. 1996b). Anything that decreases the perceived risks associated with SB purchase increases the chances that a SB will be selected. It is hypothesized that customer satisfaction decreases the perceived risks and thus increases the level of SB adoption and penetration. Through customer satisfaction, we can predict SB purchases. Based on this discussion, we formulate the following hypotheses:

Hypothesis 1: *Customer Satisfaction affects Store Brand purchases*

Hypothesis 2: *Customer Satisfaction affects the variety of store brand purchases*

Hypothesis 3: *Customer Satisfaction affects the level of trust in store brands*

3.7.2 Relationship between Trust in Store Brands and Store Brand Purchases

Consumers' purchase intentions are greatly influenced by the perceived risks associated with product purchase. Many researchers found that there is a higher perceived risk associated with SB compared to national brand purchases. Mieres, Martin and Gutierrez (2006, p.64) provide a list of studies that were conducted in different product categories. Specifically, Dick, Jain and Richardson (1995) found that low SB purchasers - those that purchase SB sometimes, rarely or never – are more likely to believe that SB are of lower quality and that their purchase represents a financial risk. Additionally, Chaudhuri and Holbrook (2001) found that different product categories influence brand trust differently due to their different characteristics. Therefore:

Hypothesis 5: *The level of trust in Store Brands affects Store Brand purchases*

Hypothesis 6: *The level of trust in Store Brands varies amongst product categories*

3.7.3 Relationship of Word-of Mouth and Store Brand Purchases

The power of both positive and negative WOM to motivate and influence behaviors is unquestionable. A major determinant of WOM is the level of customer satisfaction. Satisfied customers can help a company to acquire new customers through positive word of mouth (Howard and Sheth 1969; Sirohi, McLaughlin et al. 1998). Furthermore, keeping customers from not being dissatisfied is as important as keeping customer satisfied, since almost 60 percent of dissatisfied customers tell at least one friend about their negative experience (Richins 1983). In a market as competitive as the grocery market, grocery store retailers cannot survive if they cause dissatisfaction. In the health care and car repair services, Mittal and Lassar (1998) find that the ratio between satisfied and dissatisfied customers is four to one. We expect to have a higher proportion of satisfied customers in a grocery setting.

Hypothesis 4: *Customer Satisfaction affects word-of-mouth*

Hypothesis 7: W*ord-of-mouth affects Store Brand purchases*

3.7.4 Store Brand Adoption and Penetration in Different Retailers

Traditionally, the retailer brand and the SB are treated independently (Davies 1992a). In the literature review, it was observed that many researchers have explored the influence of SB on variables that are related to retailer brand equity

such as store loyalty and store satisfaction. However, in order to achieve synergies, we expect to see a consistency between the overall retail brand strategies and the strategies for the SB. For example, the low price strategy of a discounter, which is based on offering low priced products, must be accompanied with a low SB price strategy. Dhar and Hoch (1997) have tried to identify the reasons for the variations in SB performance across retailers. They found that retailers, through their overall marketing strategies, could influence SB sales and penetration to a large extent.

Bettman (1974) associated variables reflecting lower perceived risk and greater information with SB selection. He concluded that lower levels of perceived risk and uncertainty increase the likelihood of SB purchase. Furthermore, Consumers perceive different levels of risk when buying from different retailers (Sheinin and Wagner 2003). Possibly this can partially explain why SB penetration and performance varies across retailers (Dhar and Hoch 1997). The following hypotheses will test the same variables tested previously, but at the retail level. Therefore it is hypothesized that:

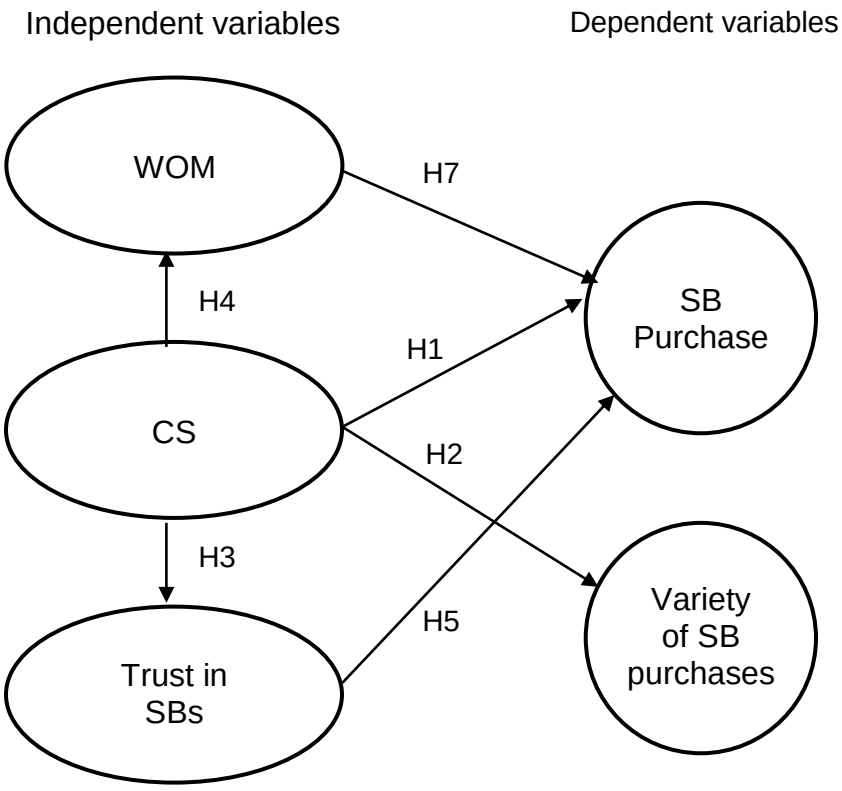
Hypothesis 8: *Store Brand adoption and penetration varies across different retailers*

Hypothesis 9: *The level of trust in Store Brands will vary by retailer*

Overall our model has nine hypotheses. Out of them, six are predictive and are illustrated in Figure 3.6. Specifically, Figure 3.6 depicts the resulting research model for this study and highlights the hypothesized relationships linking the variables. Customer satisfaction (CS) is shown to affect SB

purchases, variety of SB purchases, Word-of-mouth (WOM) and trust in SBs. Additionally WOM and trust in SBs are posited to have a direct affect on SB purchases. The other three hypotheses are descriptive and posit that there variations in the level of trust in SBs among product categories (H6), that there variations among retailers in the level of SB adoption and penetration (H8), and that there are variations in the level of trust in SBs among retailers (H9).

Figure 3.6: The Predictive Research Model



3.8 Overview of Chapter 3

In this chapter, existing studies in the marketing literature relevant to the research aim were presented and research gaps were identified that this study will try to address. Five research papers particularly provided the theoretical justification for the proposed model.

A literature review for the four constructs that make up the research framework namely: customer satisfaction, store loyalty, word-of-mouth, and trust were then presented. This literature review provided us with the necessary theoretical background to specify the construct definitions, as well as the measures that will be used to operationalize these constructs. The chapter concluded with an examination of the literature on the bivariate relationships between customer satisfaction, word-of-mouth and trust, essentially postulating bivariate research hypotheses that make up our research objectives. Figure 3.6 portrays the resulting research model and highlights the hypothesized relationships linking the variables.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.0 Introduction

The research model developed in the previous chapter and depicted in Figure 3.6 has to be tested in a scientific manner. No known method can entirely eliminate uncertainty, especially when we study human behavior and actions. The selection of an appropriate research design and methodology is crucial to any research (Philips and Burbules 2000). Furthermore, it is our task to reassure the reader that the results of the current study will contribute and provide value to the academic community.

Crotty (1998) suggested four stages in designing the research process. These are the theory of knowledge (epistemology), the philosophical position behind the methodology, the methodology or the strategies of inquiry, and the specific methods used for the data collection and analysis. The above framework is used to structure this chapter, coupled with a description of the research environment in Appendix A. This chapter aims to describe the philosophical standpoint of the researcher; the chosen research strategy and tactics employed to test the model; the methods used for data collection and the data analysis techniques. The chapter concludes with a summary of the methodology employed.

4.1 The Philosophical Standpoint of the Researcher

Research philosophies range from the interpretive approach to the positivist approach, with others lying somewhere in between (Lee 1991; Baker 2001). A positivist standpoint was taken for this research and this section aims to justify why and how the positivist paradigm fits with the research questions.

Three major differences exist between the two schools of thought. First, *ontologically*, positivists believe that reality exists objectively and independently from human experiences while interpretivists consider the subjective meaning of reality and argue that we cannot separate reality from the participants. In other words, the same phenomenon can have different meanings to different human subjects or can be interpreted differently by different researchers (Lee 1991; Weber 2004). Secondly, *epistemologically*, positivists are concerned with the manipulation of theoretical propositions using the rules of formal logic and the rules of hypothetic-deductive logic to either prove or suggest cause and effect relationships (Lee 1991; Fischer 1998; Churchill and Iacobucci 2002). Positivism as a philosophy states that knowledge is based on actual experience and that knowledge can come from affirmation of theories through scientific method. Positivism is a theory of knowledge, "*which holds that reality exists and is driven by the law of cause and effect and can be discovered through empirical testing of hypotheses*" (Fischer 1998). Interpretivists, on the other hand, assume that scientific knowledge should be obtained through understanding the human and social interaction by which the subjective meaning of the reality is constructed. They try to find out *"what meaning (motives) people give to the actions that lead*

to such patterns" (Blaikie 2000). Thirdly, *methodologically*, positivists utilize objective measurements to gather data such as experiments or surveys and they need a large volume of data to analyze. Interpretivists, on the other hand, argue that in order to understand human behavior and social interaction, the methods used in natural sciences are not appropriate. They argue that researchers need to engage in the social settings investigated and learn how the interaction takes place from the participants' perspective. They use methods such as case studies, ethnographic studies, phenomenographic studies, and ethnomethodological studies. They are concerned with developing claims that are defensible, whilst positivists collect data that are considered to be both valid and reliable. Additionally, positivists aim for replicability and generalizability whilst the interpretivists try to enhance the in-depth performance of the phenomenon under study (Lee 1991; Weber 2004).

The positivist approach has evolved into another philosophical view - postpositivism (Creswell 2003). The Postpositivism philosophical approach is challenging the absolute truth of knowledge. It states that reality exists, but can never be fully understood or explained, given both the multiplicity of causes and effects and the problem of social meaning. The supporters of postpositivism hold that human behavior is more complex and more difficult to explain (Guba 1990; Fischer 1998; Philips and Burbules 2000).

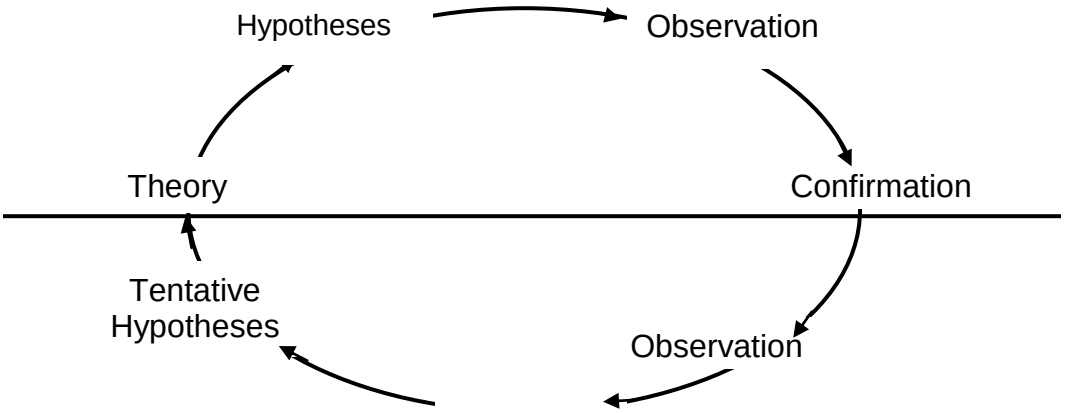
In the interpretive approach, theories tend to be generated after the data are collected and analyzed, and for that reason it is often referred to as hypothesis generating research. In the positivist approach, often referred to as

hypothesis testing research, theories are first generated and then data are collected to test the proposed hypothesis (Robson 1993). Although the positivist and the interpretive approaches appear to be in opposition, each one provides unique features for different purposes of scientific inquiry and may provide a different explanation of the same situation. Emphasis should therefore be placed on the research questions under investigation and not on which is the best approach (Weber 2004). It is the researcher's view that the research methods associated with the positivist approach – experiments, surveys, and field studies – are best suited to investigate the research questions posed within this study.

The decision to adopt the positivist approach is supported by the purpose of the study, which is explanatory in nature. As stated at the outset, the purpose is to examine the possible relationship between customer satisfaction, trust in SBs, WOM and SB purchases. A positivist view was adopted for this research, and the deductive rather than the inductive approach was used. The deductive approach was developed by Popper 'to overcome the deficiencies of positivism and the inductive strategy" (Blaikie 2000). The four steps of deductive reasoning were followed in this research: *(1) The Theory*. This research investigates the impact of customer satisfaction and loyalty (the cause) upon the acceptance and penetration of store brands (the effect). Theory was developed after considering the related conceptual background on the topic in chapters 2 and 3, *(2) Hypotheses*. Several hypotheses (see chapter 3) were derived for testing, *(3) Observation*. Data were collected to address the hypotheses, and *(4) Confirmation*. The data analysis and interpretation will either confirm or reject the

theory. During this process, shown in Figure 4.1, we may observe patterns in the data that will lead us to develop new theories. Thus, using an inductive approach, we will be in a position to propose areas for further research.

Figure 4.1: Reasoning Process



4.2 Research Strategy and Tactics

> *"After identifying the research problem or question, the selection of a research strategy is one of the most important decisions made by the researcher. It dictates the major direction, narrows the range of research tactics, and dictates much of the detail of the actual work that will follow."* (Remenyi 1998).

The primary aim of research strategy is to enable researchers to answer research questions and to control the independent variables of the study and the extraneous independent variables. The research strategy will inform the researcher's decisions over which observations should be made, how to make them and how to analyze the data from these observations. Ideally, one should

achieve these objectives as validly, objectively, accurately, and economically as possible.

As discussed in the previous section, the positivist school of thought was selected. Therefore, a quantitative research approach will be used for this study. The strategies mainly associated with quantitative research are experiments and surveys (Creswell 2003). After considering both options, the survey research method was chosen and specifically the cross-sectional survey method. In the following sections, these data collection strategies will be described in detail and then justified by evaluating their suitability for this study. Finally, a brief description of the research environment is included in Appendix A. A brief description of the retail environment in which the research was conducted is necessary for the reader to understand the research context and the chosen strategies.

4.2.1 Experiments

Experiment is defined as *"a research design in which one or more independent variables are manipulated by the researcher to examine their effects on one or more dependent variables, while controlling the extraneous variables"* (Kent 2007).

We can distinguish experiments in terms of the environment within which they take place. We have the laboratory experiment and the field experiment. A laboratory experiment is a simulated situation where the researcher creates a controlled environment in a laboratory. A field experiment is conducted in a more

natural setting with no attempt by the researcher to set up any special conditions. The manipulation of the experimental variable is imposed in this realistic setting. Comparing the two options, we can say that a laboratory experiment offers greater internal validity because of the greater control; while the field experiment offers more external validity and thus the results can be generalized. A brief comparison between the two types of experiments is provided in Table 4.1 below.

Table 4.1: Laboratory versus Field Experiment

	Laboratory experiment	Field experiment
Environment	Artificial	Realistic/Natural
Control of extraneous variables	Higher	Lower
Level of Validity	Greater internal validity	Greater external validity
Level of Control	Easier to control	More difficult
Application	Limited	Covers a wider range
Exposure to competitors	Lower	Higher
Cost	Less expensive	More expensive

Source: (Kerlinger 1986; Churchill and Iacobucci 2002; Creswell 2003)

Both types of experiment are artificial in the sense that situations are usually created for testing purposes only. This artificiality provides researchers with more control over the factors that they are studying and allows them to obtain more conclusive evidence of cause and effect relationships. Overall, experiments are regarded as a more effective way of measuring cause and effect relationships and providing evidence of causality because investigators can manipulate and control one or more independent variables and observe the effect to the dependent variable or variables (Kerlinger 1986).

In our study, if an experimental design had been selected to test the validity of our hypotheses then we would have needed to select two or more groups with matched characteristics. One group would be the experimental group and the other the control group. In the experimental group, we would manipulate the levels of customer satisfaction and SB trust (the two independent variables) and try to see their effect on store brand sales and penetration (the dependent variable). The control group would be used to control the effect of the extraneous or uncontrolled variables on the test results and provide us with a point of comparison. So, we could safely conclude that store brand sales and penetration (the observed response) was due to the different levels of customer satisfaction and SB trust (the experimental manipulation). The results from the two groups would be compared and contrasted, depending on the type of experiment, before and after manipulation. We could then safely conclude that store brand sales and penetration (the observed response) were due to the different levels of customer satisfaction and loyalty (the experimental manipulation).

4.2.2 Surveys

Surveys are the most widely used method to obtain quantitative data (Baker 2001). According to Rindfleisch et al. (2008), of the 636 empirical articles published in *Journal of Marketing* and *Journal of Marketing Research* between 1996 and 2005, approximately 30% used the survey method. Furthermore Brown and Dant (2008), found that out of the total methodological incidents

surveys were used 58% of the time. Table 4.2 below provides the results of their review of 164 articles published in the *Journal of Retailing* between 2002-2007. Thus, the survey is the most frequently used methodological approach in marketing research (Baker 2001; Brown and Dant 2008; Rindfleisch, Malter et al. 2008).

Table 4.2: Approaches to Methodology, *Journal of Retailing* (2002-2007)

Methodological Approach	Absolute Frequency	Percent
Survey	181	58
Experiment	35	11
Secondary Data	54	17
Qualitative	16	5
Modeling	8	3
Other	18	6
Total incidents	312	100

Source: Adopted from (Brown and Dant 2008)

Surveys are used in a variety of ways and for a wide range of purposes. This is possibly the reason why many authors hesitate to offer a definition (Moser and Kalton 1972; Kerlinger 1986; Karray and Zaccour 2006). It is agreed though that survey research is a quantitative method and that surveys are concerned with "*the collection of standardized information from a specific population, or some sample from one, usually but not necessarily by means of questionnaire or interview*" (Robson 1993). We can classify surveys based on their purpose and on the time needed for their completion.

In terms of their purpose, we can classify surveys into exploratory, descriptive and explanatory, although, a survey can have more than one

purpose. The exploratory survey is used to familiarize the researcher with the topic, to generate ideas and to provide insights for further research. The descriptive survey aims to describe observations in terms of what, where when and how. In such a case, the general idea is relatively simple; a set of hypothesis is developed; information for a sample of a population is collected and from this the required descriptive measures are calculated. Finally, explanatory surveys aim to explain and to provide an answer to why. They are concerned with the possible causal connections between variables but without experimental manipulation (Burns 2000).

In terms of the time dimension, we can classify surveys into cross-sectional or longitudinal. Basically the difference between these two approaches is in the time frame over which data are collected. Cross-sectional or ad hoc studies involve observations that are made at one point in time. In contrast, longitudinal studies collect data through several observations and measurements of the same subjects or the same phenomena over a period of time (Burns 2000; Babbie 2001). Table 4.3 below provides a comparison of cross-sectional with the three types of longitudinal studies. As we can see, in a cross sectional study we collect information for a sample of individuals in 1990 and we can only compare differences among the age groups. While with a longitudinal study, we can study individuals of a certain age group in 1990 and either compare the responses of the same group in 2000 (cohort study) or compare the responses of the age group in 1990 with the responses of the same subjects in 2000 (panel study) or compare the responses of the age group in 1990 with a similar age group in 2000

(trend study). Cross-sectional studies provide the researcher with a "snapshot" of a situation, whereas longitudinal studies provide the researcher with the ability to examine changes over time. The choice between these two survey designs depends on the problem the researcher is addressing. Cross-sectional studies are the most often used type of survey. Based on Rindfleisch et al. (2008), they represent approximately 94% of all surveys published in *Journal of Marketing* and *Journal of Marketing Research* between 1996 and 2005.

Table 4.3: Cross-sectional versus Longitudinal studies - Differences in Comparison basis

Cross-Sectional	Longitudinal		
1990 41 – 50 ↕51 – 60 ↕61 –70 ↕71 – 80	*Trend* 1990 2000 41 – 50 ↔ 41 – 50 51 – 60 ↔ 51 – 60 61 –70 ↔ 61 –70 71 – 80 ↔ 71 – 80	*Cohort* 1990 2000 41 – 50 ↘ 41 – 50 51 – 60 ↘ 51 – 60 61 –70 ↘ 61 –70 71 – 80 ↘ 71 – 80	*Panel* * 1990 2000 41 – 50 ↔ 41 – 50 51 – 60 ↔ 51 – 60 61 –70 ↔ 61 –70 71 – 80 ↔ 71 – 80
↔ *denotes comparison*			* denotes same individuals

Source: (Babbie 2001)

Survey or non-experimental studies have three major weaknesses: (1) the inability to manipulate independent variables, (2) the lack of power to randomize, and (3) the risk of improper interpretation. Despite these weaknesses, surveys are widely used because many research problems do not lend themselves to experimentation (Kerlinger 1986). Surveys are useful in describing the characteristics of a large population; they can be administered from different locations (mail, email, telephone), generating large samples which make the

results statistically significant, even when analyzing multiple variables; they provide flexibility in the number and types of questions that can be asked, and in how the questions will be administered (Robson 1993; Babbie 2001).

4.2.3 Justification of the Chosen Strategy

As mentioned in section 4.2.1, experiments are regarded as a more effective way of measuring cause and effect relationships and provide evidence of causality. In an experimental design researchers manipulate and control one or more independent variables and observe the effect on the dependent variable or variables (Kerlinger 1986). The above assumes that the researcher is able to manipulate the independent variables and see how people react to it. However, in the social sciences it is not always easy to modify the environment and monitor people's reactions to those changes. It is very difficult to control the inputs into the experimental situation and see what changes cause particular alterations in behavior (May 2001). The nature of this study does not allow the researcher to manipulate the causal variables in order to establish causality. Another drawback of experiments is that they have a lower external validity and the results cannot be generalized to other population and settings (Churchill and Iacobucci 2002). Consequently, experimental research is rejected for the above-mentioned reasons and the utilization of non-experimental research is considered appropriate.

In this study, a cross-sectional survey was selected. The purpose of this research is both descriptive and explanatory. It is intended to test theory, and

explain how variables are related and identify the directionality of this relationship (Figure 3.6). Additionally, we wish to make comparisons in the level of SB trial and penetration between the different retailers.

4.3 Data Collection Method

There are some key methodological decisions for surveys. These can be classified into four broad groups: (a) what methods to use for collecting the information, (b) the instrument used to collect data, (c) from whom the data is collected and (d) how to process, analyze and interpret the data. In this section, we will present the decisions related to the method for collecting data.

Since surveys require the collection of standardized information, one important decision a researcher must make is the way in which to collect the primary data (Robson 1993). Observation and interviewing are two basic methods of collecting data (Boyd, Westfall et al. 1981; Robson 1993). What method are we planning to use? If we select interviews, then how are we going to administer our interviews? These are some of the questions that we will try to answer in this section, along with the justification for our selection.

4.3.1 Observation

It is commonly accepted that it is through observation that we have acquired most of what we know today. Most of the developments in both the natural and social sciences come through observation. Observation is the process whereby

the researcher observes or watches, instead of questions. For example, the researcher can observe and record what brands consumers buy or what programs they watch on T.V. Baker (2001) describes observation as:

> *"Observation consists of the systematic gathering, recording and analysis of data in situations where this method is more appropriate – usually in terms of objectivity and reliability - and able to yield concrete results (e.g. the flow of persons in a shopping centre) or provide formal hypotheses about relationships which can then be tested by experimentation or survey analysis".*

Observation can take different forms; it can be structured or unstructured; disguised or undisguised; obtained in natural or in contrived settings; and can be human observations (taken by researchers) or mechanical (taken by devices such as a galvanometer, eye camera, etc). For a more detailed analysis of the different methods of observations see Churchill and Iacobucci (2002, pp.295-307). A common form of observation is the diary. Many marketing research companies used diaries as a way to collect primary data, especially during the 1970s. But due to cost and time limitations they have subsequently switched to interviews (Stanton and Tucci 1982). Diaries collect data by asking respondents to record information while in interviews respondents report the information. It was believed that a basic advantage of diaries was that respondents can recall information more accurately than in interviews. However, several studies demonstrated that there is no difference between the results produced by a personal interview and those from a diary (Wind and Lerner 1979; Stanton and Tucci 1982). Specifically, Stanton and Tucci (1982) found that using personal interviews to measure consumption, did not sacrifice accuracy, since a 24-hour recall interview is as accurate as a diary technique. They suggest that these

findings, as well as the high cost and time that diaries require, were the reason that they were replaced by interviews.

4.3.2 Data Collection Method for this Study: Interviewing

The observation method can be used alone or in combination with other forms of research. The researcher does not have to rely solely on the willingness of respondents to provide the required information and it can accurately record what people do and the how they do it. The most important limitation of the observation method is that it cannot tell us *why* people behave the way they do. It can not be used to observe attitudes or motivations (Boyd, Westfall et al. 1981). Considering that the focus of this study is to measure causal relationships among behavioral factors, the observational method was rejected, and the interview method selected.

Once the interview method has been selected, we need to decide upon the method to administer the questionnaire. A questionnaire can be either self-administered or interviewer-administered. A self-administered questionnaire can be executed mainly through the mail or online, while an interviewer-administered questionnaire can be administered through personal or telephone contact. All of these methods have advantages and disadvantages that have been thoroughly explained in the literature (Kerlinger 1986; Churchill and Iacobucci 2002; Fowler 2009). Briefly, a self-administered questionnaire can only be used if the population under study has the necessary reading and writing skills. It is also recommended when there is a sensitive research topic that respondents are

required to reveal such as a socially undesirable or embarrassing characteristic or behavior (Bush and Hair Jr 1985; Fowler 2009). Additionally, participants need to be motivated by the research problem to cooperate in the study, if not a low response rate should be expected (Mautz and Neumann 1970; Armstrong 1975; James and Bolstein 1992). In this study, we want to collect data from a population that is literate but the respondents are not expected to be intrinsically motivated to participate. So, an interviewer-administered data collection strategy is selected rather than a self-administered strategy.

Next, we had to decide how to approach respondents. Our options were to contact respondents either in person or through a telephone interview. In a personal interview the interviewer obtains information from respondents by face-to-face contact. Personal interviews can take place either in-home or by intercepting respondents in the street or in a mall or outside a store (Churchill and Iacobucci 2002). The in-home or door-to-door method was rejected for cost reasons. It is considered as the most expensive method since it requires extensive investment in time and travel (Walton 1997). That leaves us with the intercept and the telephone methods of data collection.

Intercept, as a data collection method, started in the early 1960s and was widely accepted by marketing researchers. The intercept is a personal interview method and as such has many of the advantages and disadvantages of in-home interviews. In the case of intercept interviews, the interviewer stays in one position and approaches potential respondents. This eliminates travel time between interviews and makes the method less costly and faster than the in-

home interviews (Bush and Hair Jr 1985; Bush and Parasuraman 1985; Holbrook, Green et al. 2003).

Telephone interviews replicate the personal interview; they have all the advantages of personal interviews, except the ability to use visual aids. There is one controversy in the literature regarding the effectiveness of telephone versus face-to-face interviewing. The critics of telephone interviews claim that the non-response rate is higher than for personal interviews, that it might not be an appropriate medium for asking personal or sensitive questions, and that there are constraints with the questionnaire and the measurement of the variables (Tyebjee 1979; Bush and Hair Jr 1985; Bush and Parasuraman 1985; Holbrook, Green et al. 2003). However, there are several studies that have compared the two methods and found that they are broadly equivalent. Walton (1997) provided a detailed comparison of mail, telephone and face-to-face data collection methods. He evaluated and rated them - see Table 4.4 below - based on what he called the Seven Rs, and telephone interviews achieved the highest rating of all three methods. Overall the main advantage of telephone interviews is that they are considered the least costly of all interviewer-administered data collection methods. Additionally, studies comparing telephone with intercept interviews found that the results are comparable with the intercept method, with the exception of probability sampling (Bush and Hair Jr 1985; Bush and Parasuraman 1985). Over the last 50 years telephone interviewing has become the dominant method of data collection in the United States and to a large extent has replaced face-to-face interviewing. (Holbrook, Green et al. 2003).

Table 4.4: Comparison of Data Collection Methods

	Mail	Telephone	Face-to-Face
Contact the RIGHT person	Medium	High	High
Reach person with RIGHT Information	Medium	High	High
Reach person at the RIGHT Time	Low	High	Medium
Ask the RIGHT questions	Medium	High	High
Use the RIGHT instrument	Low	Medium	High
Collect the RIGHT data	Low	High	High
RIGHT Cost	Medium	High	Low
Likelihood that unknown bias from refusal will be avoided	Low	High	High
Obtaining a statistically significant sample size	High	High	Low
Success in avoiding item non-response	Low	High	Low
Total Points	16	29	23

Source: (Walton 1997)

Considering all of the above, the telephone method was selected for this study mainly because the research environment and the topic qualify on the following three conditions. First, there is high penetration of telephone lines in households in Greece so there are no limitations in the coverage of the population under study. Secondly, the research topic does not require information on a sensitive or embarrassing issue. Finally, we do not expect to use complicated questions or questions that will require the use of cards, pictures or videos so the restrictions due to the limitations of the channel are limited (Groves 1990; Holbrook, Green et al. 2003). Furthermore, a computer-assisted telephone interviewing process (CATI) was available for this study.

Technological advances in telephone interviewing have further increased the usage of telephone (Struebbe, Kernan et al. 1986). CATI is a telephone survey technique that has greatly increased the advantages of central location

interviewing. The questionnaire is entered into a computer; throughout the entire process the interviewer sits in front of a computer, the computer dials the telephone numbers and when contact is made the interviewer administers the questionnaire. There are several benefits of using CATI in telephone surveys. First, there is a higher degree of control and supervision due to the centralized telephone facility. We can also achieve higher data accuracy and the ability to manage the sample is improved since reports can be compiled while running the survey. The length of data collection and time spent in administering the questionnaire is shorter since the software will skip questions that are not applicable. Additionally, data entry is much faster since the responses are directly entered into the computer. Overall, by using the CATI process, we expect to have longer average time per interview (versus using a non-CATI process), lower interviewer variability, higher information control and lower survey error (Groves, Mathiowetz et al. 1984; Churchill and Iacobucci 2002). Finally, another reason for selecting the telephone method and the CATI process was the researcher's access to a professional telephone data collection operation. The researcher used the facilities of Global Link S.A, a marketing research company, for the data collection.

Overall, in this section, we described the methods used to collect the data needed for the research. An interviewer- administered questionnaire was used and respondents were contacted by telephone. The next section, describes the instrument used to collect the data.

4.4 Data Collection Instrument

The aim of a data collection instrument is to measure our independent and dependent variables and thus help us to fulfill our research objectives. The questionnaire is the main tool for collecting quantitative primary data and an important element in the success of the survey. A structured questionnaire is the tool that provides a standardized interview across all respondents so that each respondent is asked the same questions in the same order (Malhotra 2006; Brace 2008). In this study, a structured questionnaire was prepared for use in the telephone survey and to measure the constructs of the model both multi-item and single-item scales were used.

With a questionnaire the researcher expresses the questions to which he or she wants to know the answers. A poorly designed questionnaire will affect the quality of the data collected and will prohibit the researcher from meeting the research objectives. Questionnaire design is regarded as an important element of the overall research process (Churchill and Iacobucci 2002). The following sections describe in detail the process of the questionnaire design and the composition of the questionnaire.

4.4.1 Measurements and Questionnaire Design Process

The first step in questionnaire design is to specify the information needed. The conceptualization of the constructs as well as the hypotheses described in chapter three helped us determine what information was needed and the type of questions required (Churchill and Iacobucci 2002). To measure the model

constructs we used both multi-item and single-item scales (Table 4.5). Scales were derived from measures reported in the literature and adapted to suit the context of the study.

Table 4.5: Measurement variables and Sources

Construct	*Source*
Customer satisfaction	Adapted from McGoldrick (2002)
Satisfaction factors - Service environment - Service delivery - Service product	Based on Rust and Oliver (1994)
Level of trust in SBs	Based on Selnes 1998
Word-of-mouth	Based on East, Hammond etal. (2007)

The next step is to determine the type of questionnaire and the method of administering the questionnaire. As we indicated on the previous section, a telephone structured interview approach was selected. A standardized way of collecting data was used so that the data could be recorded, analyzed and compared.

The third step is to decide on the form of the response. Since a telephone interview approach was selected, there were some points that required special care when designing the questionnaire. It was decided to use closed-ended, easy to understand questions. Additionally, in order to help respondents keep all the possible answers in mind, questions were used that did not require a card listing of possible responses (Tyebjee 1979). Respondents were asked to indicate their level of satisfaction or dissatisfaction with each statement related to the construct measured. An itemized Likert rating scale was used and each category of the scale was briefly described to the respondents (Churchill and

Iacobucci 2002). Holbrook, Green and Krosnick (2003) found that telephone surveys have a significantly higher level of no-opinion response than in face-to-face interviewing. Considering this finding, the middle option “neither - nor” was excluded and four possible response categories were selected for measuring the variables of customer satisfaction and level of trust in SBs in the questionnaire. Each level, of satisfaction or dissatisfaction, was given a numerical value from 1 to 4 and the respondent’s total score was computed by summing the values from all of the statements. The Likert scale is an ordinal type of scale but is often treated as an interval scale (Clason and Dormody 2000). An itemized 4-point rating scale is quick to administer and can be easily grasped by respondents. In the case that respondents could not respond, in addition to the 4-point scale, respondents could indicate “don’t know / don’t remember”. This response was not offered as an option to them, so it was not part of the scale.

Next it is necessary to consider the manner in which questions are asked and to determine the wording of each question. This is a critical step since poor phrasing might result in incorrect responses or in high item non-response. Questions must be simple so that all participants will understand them. They must be clear and unambiguous so that they will mean the same to all participants (Moser and Kalton 1972; Churchill and Iacobucci 2002). Additional effort was placed to avoid leading questions. This is especially important when designing closed questions where the possible answers provided must cover all possible types of responses and must be equally distributed across the range (Brace 2008).

Consideration is also given to the order in which questions are asked. The order in which researchers pose questions can make a difference to the answers they receive. The researcher should use simple, interesting questions at the beginning, and also start with broad questions, narrowing down to the more specific later on. Additionally, questions should be placed in such a way so that one question should not affect the responses to the next questions (Babbie 2001; Churchill and Iacobucci 2002).

The final step in the design process is to pretest the questionnaire. This is necessary to present the questionnaire under field conditions and test how long it takes to complete, to check that the questions are understood and that the instructions are clear, to allow the researcher to eliminate questions that do not produce usable data or to add others, and to check the question sequence. The questions were finalized after an initial pilot test of 20 personal interviews. A personal interview was used for the pretest so that the researcher could directly observe behaviors and reactions of the participants. The pilot test did not reveal any major problems. The questionnaire was designed and administered in Greek and then directly translated into English by the researcher who gave extra attention to providing an accurate translation of meanings rather than just providing a literal translation. See Appendix B for a copy of the final version of the survey questionnaire in English.

4.4.2 Composition of the Questionnaire

Subjects who participated in the study were asked to answer a six-page questionnaire with closed-ended, four point scale questions. It was decided to omit a confidentiality assurance statement for two reasons. The topic of our study was not controversial or threatening to the respondents and secondly there is a debate among researchers upon its value. Some researchers state that a confidentiality assurance may alert respondents to the fact that the topic is sensitive, and make them less willing to participate (Singer, Hippler et al. 1992). On the other hand, findings suggest that the level of awareness over the reasons for the survey and of the organization conducting the survey, improve participation (Struebbe, Kernan et al. 1986). So, in order to improve participation, the interviewer started with a short statement reassuring respondents that the survey was not a sales pitch and explaining the broad topic of the survey (Brennan, Benson et al. 2005). The first question had as the objective of excluding respondents who work in marketing research, advertising or supermarket companies, so that the interviewer could stop the interview process.

The rest of the questions on the first page were aimed at qualifying the respondents through behavioral and demographic information. Since we wanted respondents to provide their views on the retailer's SB and to rate the retailer using selected customer satisfaction factors, it was necessary that all respondents had extensive shopping experience with the specified retailer over time. For that reason, those participants that were responsible for household

purchases and that their main grocery store was among those indicated on the list were selected. Additionally, participants below 18 and above 65 years old were excluded from the survey. Our respondents were therefore people aged 18 to 64, responsible for grocery shopping and their main supermarket was one of the nine leading supermarket chains in Greece.

In question 1, we asked respondents to identify the supermarket in which they make *most* of their purchases (their "main" supermarket). As we have explained in Appendix A, we have focused our survey on the top nine grocery retailers in Greece, listed in Table 4.6, which capture more than 75 percent of grocery spending over the last few years. If respondents did not indicate any one of these nine grocery retailers, the interviewer was instructed to close the interview. In the next question, question 2, we asked respondents to identify the supermarket(s) that they *occasionally* do their shopping. The aim of question 3 was to assess the shopping behavior of the respondents for the "main" supermarket as well as the one that is shopped occasionally. So, they were asked to identify the frequency of their visits.

Table 4.6: List of the nine super markets

Question 1		
AB VASILOPOULOS (Delhaize Group)	1	Continue Interview
ATLANITK	2	
SPAR VEROPOULOS	3	
CARREFOUR	4	
LIDL	5	
CHAMPION MARINOPOULOS	6	
GRAND MASOUTIS	7	
MY MARKET	8	
ΣKLAVENITIS	9	
Other. Explain	0	Close Interview
None	X	
Don't Know/ Don't Remember (DK/DR)	Y	

The next questions measured the respondents' satisfaction with their "main" supermarket, their level of SB purchase, and their level of trust of the retailer's SB. In question 14, we measured the respondent's intention to recommend their main store to friends. The questionnaire concluded with demographic questions on marital status, occupation and level of education of the respondent. The measures used to capture the three exogenous latent constructs were described in chapter three and we will discuss them again at the end of this chapter. The measurement items, as well as the process of measurement for the endogenous and the exogenous constructs are indicated in Tables 4.7 and 4.8 respectively.

Table 4.7: Measurement of the Endogenous Construct

Construct/Measurement Item	Question	Process of Measurement
SB purchase: Buyers/users of SB Non-buyers/Non-users of SB	Q7	Direct measurement. Q7 will provide us with two categories. Purchasers and non-purchasers. Purchasers all those that indicated purchase from any one of the 10 product categories.
Level of SB purchase: Light users Medium users Heavy user	Q7	The measurement for the level of SB purchase is derived from Q7. Each case will be represented with the following metric scale: Non-purchasers: 1 Light user (purchase one SB): 2 Medium user (two to three SB): 3 Heavy user (three and above): 4

Table 4.8: Measurement of the Exogenous Constructs

Construct/Measurement Item	Question	Process of Measurement
<u>Customer satisfaction:</u> *Service Environment* - cleanliness of the space - signs in the aisles of the store - music inside the store - Playground for the kids* * This item was excluded from the analysis *Service Delivery* - Availability employees for help/service - prices are visible on the shelves - prices are the same on the shelves and at the cashier - Frequency of out of stocks ** - Frequency of expired products *** *Service Product* - Level of satisfaction with the width - Level of satisfaction with the depth - The size of the store - distance from the house/work - parking	Q4_a1 Q4_a2 Q4_a4 Q4_a5 Q9_a1 Q9_a2 Q9_a3 Q10 Q11 Q5 Q6 Q4_a3 Q4_a6 Q4_a7	The measurement for Customer satisfaction was derived by adding up the scores for the three latent variables. All items were measured using the following scale: Very satisfied = 4 Somehow satisfied = 3 Not so satisfied = 2 Not satisfied at all = 1 Except for the items: ** Always find = 4 Find most of the times = 3 Often encounter O.O.S = 2 *** Often find expired products = 2 Rarely find expired products = 3 Never find expired products = 4
<u>Trust in SB</u>: *Trust in Food SB* - Luncheon Meat/Cheese - Soft drinks - Dairy products - Wine - Beer - Other food products - Juices *Trust in Non-Food SB* - Detergents - Shampoo & Bath foams - Paper products	Q8_a1 Q8_a2 Q8_a4 Q8_a5 Q8_a6 Q8_a8 Q8_a10 Q8_a3 Q8_a7 Q8_a9	The measurement for the level of trust in SB is indirect. A metric scale was used to calculate the level of trust. The scores for the food and the non-food product categories were added together. The scale was: Trust a lot = 4 Trust somehow = 3 Trust a little = 2 Do not Trust at all = 1
<u>Word – of – Mouth:</u>	Q14	Direct measurement. Respondents were asked their Intention to recommend. The scale was: Definitely = 4 May be I will= 3 May be I will not = 2 Definitely not recommend = 1

4.5 Sample Design

Surveys require the collection of data for the population under study. Since collecting data from the entire population is prohibitive due to time and cost, sampling is required. Sampling is the process of selecting a sufficient number of observations from a population so that by studying the sample the researcher can draw conclusions for the entire population. One of the major concerns with surveys is related to how well a sample represents the population under study. It is essential to permit generalization from a sample to a population (Krosnick 1999). In this section, the sampling process will be discussed in respect of the following four aspects: (1) defining the target population and the sampling frame, (2) selecting the sampling selection process, (3) determining the sample size and (4) sources of sampling errors.

4.5.1 Target Population and Sampling Frame

The first step in selecting a sample is to identify the population from which the sample is selected. Our target population is the person, aged between eighteen and sixty-four and resident within private household in Athens and Thesaloniki (the two largest cities in Greece), who is responsible for the household's grocery shopping from any one of the nine leading supermarket chains. The sampling frame was the telephone directories, in electronic form, for the two cities selected. CATI randomly selected and dialed the numbers. As indicated in Table 4.9 and 4.10 below, the population in these two cities is 2.653.907

individuals living in 1.375.410 households. This is based on the census, of the National Statistical Services of Greece 2001 (www.statistics.gr) and on an estimate by Data Power S.A, a data collection and data mining company**.** A household is defined by the National Statistical Services of Greece as:

> *"a) any person living alone in a separate housing unit or occupying a room as a lodger, provided that, in this case, he does not share meals with the family he is staying with, and b) a group of two or more persons (related or not) living together in the same housing unit and sharing meals".*

This is the same definition that is recommended by Eurostat. Table 4.9 provides a more detail description of the population broken down by age group for each of the two cities selected and Table 4.10 provides the total number of households for each city.

Table 4.9: Population by age group in the two major cities

	18 – 24	25 – 34	35 – 44	45 – 54	55 - 64	Total	%
Athens	333.316	541.503	485.636	433.035	329.831	2.123.321	*80.0*
Thesaloniki	94.064	134.641	118.081	101.831	81.970	530.587	*20.0*
Total	427.379	676.144	603.717	534.866	411.801	2.653.907	
%	*16.1*	*25.5*	*22.7*	*20.2*	*15.5*		

Source: Narional Statistics, www.statistics.gr

Table 4.10: Number of Households in the two major cities

Athens	1.081.010	*78.6%*
Thesaloniki	294.400	*21.4%*
Total	1.375.410	

Source: Estimated by Data Power using National Statistics

4.5.2 Sample Selection

The next step in determining the sample is to specify the process used to select the population under study. There are two broad sampling methods: probability and nonprobability sampling. In probability samples, each element of the population has a known chance (or probability) of being selected for the sample. This implies that the sampling operation is controlled objectively and that the items are chosen randomly. So, the person undertaking the study does not influence the selection of sample items. Another advantage of probability sampling is that the "*sampling error"* can be calculated because a sample rather than a census is employed. Sampling error is the degree to which a sample might differ from the population. So, when inferring to the population, results are reported plus or minus the sampling error. Probability sampling is time consuming and expensive. It is used when researchers want accurate descriptions of the population and in large-scale surveys. Probability methods include random sampling, systematic sampling, and stratified sampling (Babbie 2001; Churchill and Iacobucci 2002).

In nonprobability sampling, not all elements of the population have a known chance of being included in the sample; they are selected from the population in some random manner. So, to a large extend the selection process is subjective and it relies on either the researchers or the interviewers judgment. In nonprobability sampling, the degree to which the sample differs from the population cannot be measured. So, we cannot evaluate the adequacy of the sample. An advantage of this method is that sampling tends to be less

complicated and less time consuming than probability sampling. In our study, as it was explained in section 4.2.3, we have selected to collect our data through telephone interviewing. A major problem that researchers face with telephone interviewing is that of obtaining representative probability sample due to the nonresponse rate. So, even if we use a probability sample and select some elements of the population, we might fail to obtain information from them due to nonresponse. In telephone interviewing, nonresponse might be attributed either to the percentage of the population that do not have a telephone line in their home or to the percentage of those that do not list their number in the directory or to the increased usage of cell phones to the detriment of household telephone lines (Smith 1983; Fowler 2009). The above issues add a non-random selection to random sampling and destroy any attempt for randomization. Thus, a nonprobability sample was selected.

Nonprobability methods include convenience, judgment, and quota sampling (Babbie 2001; Churchill and Iacobucci 2002). The most widely used method of sampling in marketing surveys is the nonprobability quota sampling (Hauser and Hansen 1944; May 2001). A quota sample attempts *"…to ensure that the sample is representative by selecting sample elements in such a way that the proportion of the sample elements processing a certain characteristic is approximately the same as the proportion of the elements with the characteristic in the population"* (Churchill and Iacobucci 2002). Quota sampling is often confused with stratified and cluster sampling, two probability sampling methodologies. All of these methods sample a population that has been

subdivided into classes or categories. The primary differences between them is that with stratified and cluster sampling the classes are mutually exclusive and are isolated prior to sampling. Thus, the probability of being selected is known, and the members of the population are chosen at random. In quota sampling, sampling within each category is non-random and members of the population are arbitrarily disqualified from being selected (Moser and Kalton 1972; Churchill and Iacobucci 2002). Quota sampling can be either proportionate or non-proportionate. Proportionate quota sampling is based on population proportions and the number of observations is allocated accordingly. For instance, if we know that a certain grocery retailer has a market share of two percent and we have a total sample of 900 respondents, with the proportionate quota sample, we need to select 18 respondents that purchase from that grocery retailer. Therefore, the proportionate quota ensures that the composition of sample is the same as the composition of the population with respect to the market share of each retailer. In non-proportionate sampling, we identify the sub-groups from which we want to ensure sufficient coverage and then specify the sample size for each sub-group

In our study, a non-proportionate quota sample was selected due to the specific nature of our research objectives. Our study is focusing on those retailers that offer SB, and we want to compare results across the different retailers that offer SB. So, it is important that these nine supermarkets - the control characteristic - were represented in our sample. The interviewer was instructed to select respondents from each retailer based on a specified

proportion. When the quota sample was reached, the data collection for this retailer was completed and additional respondents were discarded from the results. Overall, the non-proportionate quota ensures that shoppers from the nine major grocery retailers that sell SBs would be included in the sample and that we will have enough responses per retailer to ensure the validity of our analysis at the level of the selected retailer.

4.5.3 Sample Size

The next step is to determine the required sample size for our study. Considering the above-mentioned requirements of our research model, we needed to assure validity for the statistical analysis for each of the nine retailers that we have selected. For that reason, we used a quota sample of one hundred respondents per selected retailer. Overall the total sample size was 900 respondents. Determining the required sample size is a complex issue; the researcher should place extra effort in order to minimize the sampling error and the non-sampling error.

4.5.4 Sources of Sampling Error and Nonsampling Error

Errors may occur at any step in the research process and the errors at each step comprise the total research error. The sampling error is related to the overall sample design, while the nonsampling error is related to the data collection method and it is caused by either failure to obtain data or from errors in

observation (Churchill and Iacobucci 2002). Both types of error must be considered when designing a research project.

Sampling error is caused when the sample selected is not representative of the population studied. Sampling error cannot be assessed in quota sampling. The sampling error is easier to control and to measure than the non-sampling error. We can control sampling error by increasing the sample size, and we can estimate it by using probability sampling procedures (Churchill and Iacobucci 2002). However, one common misconception is that the adequacy of a sample depends on the fraction of population that is included in that sample. Many researchers believe that sample size is not necessarily the most important consideration when designing a survey (Burns 2000; May 2001). A large sample size would provide better accuracy for the findings but it also increases the probability of non-sampling error. In fact, one study that investigated the incidence of sampling versus non-sampling errors found *"that nonsampling error is the major contributor to total survey error, while random sampling error is minimal"* (Assael and Keon 1982).

Non-sampling errors are caused by basically two factors – those due to nonresponse or those due to inaccurate reporting of the responses. Since we have selected a non-proportionate sample for our study, bias can be introduced into this type of sample for two reasons. Interviewers have to reject respondents; when the respondents who are rejected, because the class to which they belong has reached its quota, differ from those who are used. Secondly, interviewers might either by mistake or dishonestly place respondents in the wrong category.

We tried to reduce interviewer biases by providing them with precise instructions and close supervision.

Non-coverage errors are related to the sampling frame. As mentioned previously, our sampling frame is the telephone directories. It is estimated that approximately 90% of all households have a static line. The penetration of static telephone lines has declined over the last few years, owing to the growth of mobile telephones. Demographically those that do not have a telephone line in their household are mostly immigrants and students. Due to the command of the language, immigrants would not necessarily qualify to respond to our questionnaire. So, the non-coverage error due to those that do not have a telephone line is not a major problem. The other cause of non-coverage error is unlisted telephone lines. It is estimated that approximately eight percent of those with phones do not list their number in the directory (Source: National Statistics and estimation by Data Power S.A). It is the researchers opinion that the non-coverage error is not a major problem.

4.6 Survey Procedure

Having determined the sampling procedure the next step is to discuss how the survey was conducted. In this section we will briefly describe how the overall field operation was planned and executed, and highlight possible problems encountered during the fieldwork.

The main consideration in planning the fieldwork was the timing of the survey. Timing of the survey is especially important when measuring satisfaction,

a time dependent variable. Engeldow (1977) indicated that timing influences satisfaction measurements. Some researchers suggest that satisfaction measures should be obtained immediately after purchase (Oliver 1981), whilst others suggest that satisfaction should be measured when customers have had time to experience the purchase (Diamantopoulos 1988). In this study, the questionnaire was executed by telephone. So, there was no control over the time between the last purchase and the time of measurement. However, we should take into consideration that the research is focused on the supermarket industry and that frequent visits are expected. Consequently, consumer reactions should not be subject to too much time decay (Oliver 1981).

The execution of the fieldwork is an important factor in reducing non-sampling error and specifically non-response. The main sources of non-response error in telephone surveys are the “not-at-home” and “refusals to respond” categories (Churchill and Iacobucci 2002). We tried to reduce the “not-at-home” incidence by planning a callback telephone schedule, and by calling back at different times of the day. In order to reduce the refusal rate, we used experienced interviewers and provided information about the study to the respondents (Churchill and Iacobucci 2002). Additionally, we took extra care when designing the questionnaire (see sections 4.4.1 and 4.4.2).

Data collection was administered by Global Link S.A; a leading marketing research company in Greece. Thirty-two experienced interviewers were employed on the survey, which was conducted from the centralized interviewing facility of Global Link S.A in Athens. The data collection procedure lasted less

than a month, from October 16 until November 6, 2007. Thus, the fieldwork was conducted well before the crisis in the Greek economy.

4.7 Method of Data Analysis

In this section, the statistical techniques and procedures employed in data analysis will be outlined. We present the initial data analysis as well as the confirmatory data analysis that was undertaken. Specifically, the selected procedures are presented under univariate, bivariate, and multivariate analyses.

There is a large range of statistical tests to select from. In order to select the most appropriate test, a number of factors must be taken into consideration. First we need to consider our overall research objectives and based on that, determine the analysis objectives. These two should be linked since the analysis objectives should help us achieve the research objectives (Diamantopoulos and Schlegelmilch 1997). Secondly, we need to consider our proposed conceptual model, the relationships that it examines, and the number of variables modeled (Hair, Black et al. 2010). Additionally, we need to take into consideration the recommended sample size for each statistical test (Diamantopoulos and Schlegelmilch 1997).

In this study the main objective is to examine the effect of customer satisfaction, word-of-mouth and level of SB trust in SB purchases. This objective, to find out whether such causal relationships exist, and the direction of causality, will lead to the selection of the appropriate statistical technique.

Therefore, the objective of the statistical analysis was to test the proposed hypotheses. Table 4.11 summarizes the types of statistical techniques applied in the analysis of the survey data. A more detailed discussion of the methodological issues and the justification of the selected techniques will be presented in the next sections.

The Statistical Package for the Social Science (SPSS) version 17.0 was chosen as the computer program for the univariate and bivariate data analysis. SPSS is the most commonly used software for quantitative analysis in social sciences (Burns 2000; Babbie 2001). The software for the multivariate data analysis will be described and justified in section 4.7.3.

Table 4.11: Summary of Statistical techniques used for data analysis

Data Analysis	**Method of Analysis**
Demographic characteristics	Descriptive statistics
Hypothesis	
H1: Customer satisfaction affects Store Brand purchases	PLS
H2: Customer satisfaction affects the variety of Store Brand purchases	Chi-square for independence
H3: Customer satisfaction affects the level of trust in Store Brands	PLS
H4: Customer satisfaction affects word-of-mouth	PLS
H5: The level of trust in Store Brands affects Store Brand purchases	PLS
H6: The level of trust in Store Brands varies amongst product categories	Friedman's ANOVA
H7: Word-of-mouth affects Store Brand purchases	PLS
H8: Store Brand adoption and penetration varies across different retailers	One-way ANOVA
H9: The level of trust in Store Brands will vary by retailer	One-way ANOVA

4.7.1 Univariate Analysis

Univariate analysis is the simplest form of quantitative analysis. It explores each variable separately and describes individual variables in a given data set. With univariate analysis we can obtain the frequency distribution of the data for a given variable; provide measures of central tendency of the values, and the dispersion of the values reported for each variable. Thus, univariate analysis focuses on describing.

Overall, the aim of the univariate data analyses in this study was to: (a) provide preliminary insights into the nature and structure of the data; (b) provide a description of the basic demographic characteristics of the respondents; (c) assess data quality; and (d) provide a descriptive analysis of responses for single variables. The demographic characteristics of the respondents, and the relevant descriptive analysis of the data will be presented in the next chapter.

4.7.2 Bivariate Analysis

Bivariate analysis involves the comparison of two variables (X, Y) simultaneously; it aims to determine relationships between pairs of variables under study through a correlation analysis between the constructs. Thus, it can be used to test hypotheses of association and/or to determine causal relationships among the variables (Babbie 2001; Hair, Black et al. 2010). There are many techniques available for making comparisons. Diamantopoulos and Schlegelmilch (1997) suggest that the decision of which technique to select depends upon: (a) what is being compared? (b) how many groups or how many measures do we have? (c) what is the level of measurement? (e.g. nominal, ordinal, interval, or ratio. Considering these criteria, the bivariate analyses carried out were: the chi-square for independence; the Friedman two-way analysis of variance (ANOVA); and one-way ANOVA. In the following paragraphs, a brief description of each technique is presented, as well as a justification for the selection.

Chi-Square for independence was selected for testing H2. The chi-square test is used when we want to compare two or more than two groups on a categorical variable. It tests whether there is a relationship between categorical variables (Diamantopoulos and Schlegelmilch 1997). In our hypothesis, we want to see whether there is a relationship between customer satisfaction and the variety of SB purchased. Depending on the variety of SB purchased, we have grouped respondents into four categories: non buyers are those that have indicated that they do not buy SB; light buyers are those that buy one product category; medium buyers are those that buy two or three product categories; and heavy buyers are those that buy from four product categories. Respondents could also fall into four categories of customer satisfaction (Table 4.12). Therefore, we are measuring only categorical variables. A combination of the two categories provides us with a contingency table with 16 categories (4x4). The contingency table provides us with the number of responses that fall into each combination of categories. The chi-square test compares the actual or observed frequencies to the frequencies expected by chance (Field 2009).

Table 4.12: Customer Satisfaction Categories

Customer satisfaction Category	Average Level of satisfaction
Unsatisfied	1 – 2,3
Little satisfied	2,4 – 2,8
Satisfied	2,9 – 3,4
Very satisfied	3,5 – 4,0

Friedman's ANOVA was selected for testing H6. This is a nonparametric test and is appropriate for testing differences between more than two conditions

when the same participants have been used in all conditions. The Friedman's ANOVA ranks the data for each respondent, adds up the ranks for each condition, and then calculates the test statistics F_r (Diamantopoulos and Schlegelmilch 1997; Field 2009). In our hypothesis, we test differences in the level of trust between the ten product categories of SB. Therefore, the sample of respondents (a single group) provides ten different measurements, which are then contrasted. The null hypothesis is that there are no differences in the level of trust among the product categories. The level of trust can range from a minimum of 1 ("do not trust at all") to a maximum of 4 ("trust a lot"). Therefore, we have ten ordinal level measures, one per product category that needs to be compared to one another. The responses for each product category are ranked and the chi-square distribution with 9 degrees of freedom (number of variables – 1) as well as the significance was calculated.

The one-way ANOVA was selected to test H8. ANOVA is an extension of the *t*-test but it can be applied when more than two means are being compared to see if there are any significant differences among them. If we have two means to compare, then ANOVA provides the same results as the *t*-test for independent samples. When we have to compare more than two means and the level of measurement is interval, we use ANOVA rather than conducting multiple *t*-tests. To test H8, the one-way ANOVA was selected to compare the differences in mean values of the constructs among the groups because: (a) there are nine groups that are being compared (the nine grocery chains selected each one with a sample of 100 respondents), and (b) the level of adoption and penetration of

SBs (the construct of interest) is being measured on an interval scale (Diamantopoulos and Schlegelmilch 1997). Specifically, we have created a new variable, called “SB variety” that measures the level of SB purchase. Depending on the number of SB product categories that respondents have purchased “SB variety” can range from a minimum value of “0” to a maximum of “10”. Respondents that they do not buy SBs are represented with the minimum value and respondents that buy SBs are represented based on the number of SB product categories that they buy (e.g. “1” for those that buy one product category, “2” for two categories, etc.). Thus, we have an interval scale since we establish an ordered relationship between respondents with regard to the number of SB products that they buy (Diamantopoulos and Schlegelmilch 1997; Hair, Black et al. 2010).

The one-way ANOVA was also selected to test H9. In this case, we also have the nine grocery chains and the construct of interest is the level of trust with the SB. Therefore, we want to test whether there are differences in the mean values of the level of trust with the SBs among the nine grocery chains. Our data provide information for the level of trust for ten different product categories and it can range from a minimum of “1” (do not trust at all) to a maximum of “4” (trust a lot). We measure level of trust as the average level of trust for the 10 product categories. Thus, the level of measurement is interval. Therefore, the one-way ANOVA is appropriate (Diamantopoulos and Schlegelmilch 1997).

4.7.3 Multivariate Analysis

Hair et at. (2010), define multivariate analysis as *"all statistical techniques that simultaneously analyze multiple measurements on individuals or objects under investigation"*. There are several different multivariate analysis techniques that cover a wide range of research situations. Table 4.13 portrays these techniques and was used as a guide in selecting the most appropriate for this research.

In this study, as we divided our variables into independent and dependent variables, the selection was limited to the top eight multivariate techniques presented in Table 4.13. SB purchase represents the dependent variable that is to be predicted or explained by the three independent variables of customer satisfaction; level of trust in SB; and word-of-mouth. We need to examine multiple relationships between the dependent variable and the independent variables. As Table 4.13 indicates, structural equation modeling (SEM) techniques allow us to explain relationships among multiple variables (Hair, Black et al. 2010). The options amongst the SEM techniques are Covariance-Based SEM (CBSEM) and Partial Least Squares (PLS) or Projection to Latent Structures. The CBSEM is the best-known causal modeling technique as demonstrated by software such as LISREL, EQS, AMOS, SEPATH, and RAMONA. Many researchers see CBSEM as synonymous with SEM (Chin 1998a; Hulland 1999). PLS is an alternative technique to SEM-based analysis that was first introduced by Herman World in 1966 as an econometric technique and since then has been extended in several ways (Westlund, Kallstrom et al.

2008). Many researchers believe that PLS has many advantages in comparison to other covariance-based methods (Fornell and Bookstein 1982; Chin 1998b).

Table 4.13: Basic characteristics for selecting a Multivariate Technique

Multivariate Techniques	**Type of relationship among variables**	**# Of variables predicted**	**Type of measurement scale**
1. Multiple Regression	Dependence	One dependent variable in a single relationship	Metric
2. Conjoint analysis			Metric/Nonmetric
3. Multiple discriminant analysis			Nonmetric
4. Linear probability models			Nonmetric
5. Canonical correlation		Several dependent variables in a single relationship	Metric
6. Canonical correlation with dummy			Nonmetric
7. Multivariate analysis of variance			Nonmetric
8. Structural equation modeling: CBSEM – PLS*****		Multiple relationships of dependent & independent variables	Metric/Nonmetric
	Type of relationship among variables	**Examines Relationships among**	**Type of measurement scale**
9. Factor analysis	Interdependence	Variables	Metric
10. Confirmatory factor analysis		Variables	Metric/Nonmetric
11. Cluster analysis		Cases/Respondents	Metric
12. Multidimensional scaling		Objects	Metric/Nonmetric
13. Correspondence analysis		Objects	Nonmetric

Source: Adopted from Hair, Black et al., 2010, pp.12-13.
Source:(Chin 1998a; Barroso, Cepeda et al. 2010)

The PLS method was selected for this study. PLS is a statistical approach for modeling complex multivariate relationships among observed and latent

variables. This method was selected mainly because we use formative indicators as measures that form or cause the creation or change in the latent variable (LV) and PLS can model formative indicators. In the CBSEM approach, all items or indicators used to measure a LV "*must be reflective to be consistent with the statistical algorithm that assumes that the correlation among indicators for a particular LV are caused by that LV*" (Chin 1998b). PLS is suggested by many researchers as a method to overcome this limitation (Fornell and Bookstein 1982; Chin 1998b; Diamantopoulos 2008; Chin 2010a). Additionally, the use of PLS in measuring customer satisfaction is widely accepted, and it is the common statistical method for the European Performance Satisfaction Index (EPSI Rating) (Fornell and Bookstein 1982; Fornell 1992; Fornell, Johnson et al. 1996).

Temme et al. (2010) provide a detailed review of the different PLS programs available with regard to system requirements, methodological options, and user friendliness. They have compared LVPLS and PLS-GUI, VisulaPLS, PLSGraph, SPAD-PLS, and SmartPLS. We selected SmartPLS for the analysis because of its flexibility, user friendliness, and support (Temme, Kreis et al. 2010). The latest version of the software was downloaded free of charge from the web page http://www.smartpls.de. The data from SPSS were converted to a CSV file and imported to SmartPLS for processing. SmartPLS works with standardized data and the data in our study were already standardized. So, when we run the PLS algorithm we selected in the data metric "original" rather than "Mean 0, Var 1".

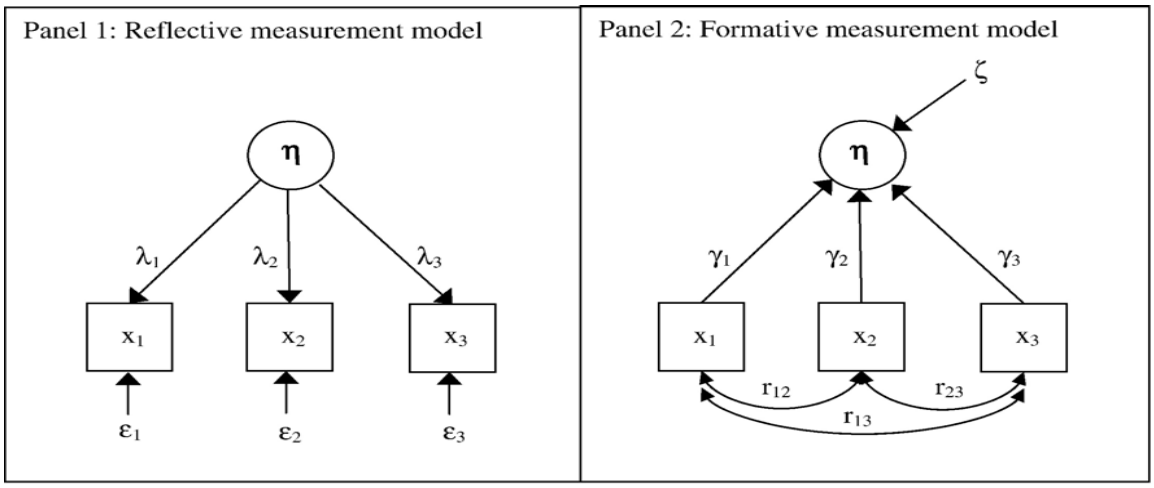
To pursue PLS analyses we need to specify the outer or measurement model; the inner or structural model; and the weight relationships (Westlund, Kallstrom et al. 2008; Duarte and Raposo 2010). The outer or measurement model describes relationships between a construct and its measures, while a structural model specifies relationships between the different constructs. In the following sections, we will describe these, as well as the method of evaluation that was used.

4.7.4 PLS: The Outer Model

The outer model describes the relationships between the observable variables, which are called manifest variables (MV) or indicators, and the unobservable latent variables (LV) or constructs. The nature of the relationship between a construct and its indicators can be modeled in three ways: the reflective (Mode A or principal factor model), the formative (Mode B or composite latent model), and the MIMIC (Mode C). All three models as well as the relationships between the LV and the MVs are presented in Figure 4.2 and 4.3 below (Chin 1998a; Diamantopoulos, Riefler et al. 2008; Franke, Preacher et al. 2008; Westlund, Kallstrom et al. 2008). In this study, the formative measurement model was selected for all constructs. In the reflective model, the MVs are reflections of the LVs (LV→ MV); the indicators are known as effect indicators and the LV as latent construct. The reflective model is the most common type used in SEM and particularly in the business field. In the formative model, the MVs cause variance in the LV (LV← MV); the indicators are known as formative indicators and the LV

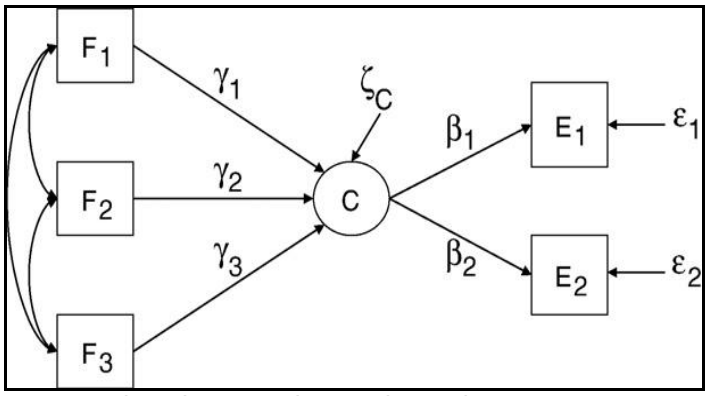
as the emergent construct (Diamantopoulos and Winklhofer 2001; Coltman, Devinney et al. 2008; Westlund, Kallstrom et al. 2008; Cenfetelli and Bassellier 2009). The MIMIC (multiple indicators-multiple causes) model is a mixture of the reflective and the formative models (Franke, Preacher et al. 2008; Vinzi, Chin et al. 2010).

Figure 4.2: Reflective and Formative measurement models



Source: (Diamantopoulos, Riefler et al. 2008)

Figure 4.3: MIMIC model



Source: (Franke, Preacher et al. 2008)

It is important for researchers to select the appropriate measurement model. Misspecification of the measurement model can bias inner model

parameter estimation and lead to incorrect conclusions on tested relationships (Jarvis, Mackenzie et al. 2003; Diamantopoulos, Riefler et al. 2008). According to Diamantopoulos and Winklhofer (2001, p.274), there is "*an almost automatic acceptance of reflective indicators in the minds of researchers*". They believe that in many cases, constructs are operationalized with reflective indicators instead of the more appropriate formative indicators. Jarvis, Mackenzie et al. (2003) through their research on the marketing literature confirmed the above. They found that 29% of top-level marketing articles have adopted the wrong model and from those 95% had incorrectly used the reflective instead of the formative model.

The selection of the model should also be based on theoretical considerations, the objectives of the study, and empirical issues (Fornell and Bookstein 1982; Diamantopoulos and Winklhofer 2001). In order to determine which one is the appropriate measurement model for this study, we have used the four primary decision rules - the direction of causality, the interchangeability of the indicators, the intercorrelation among the indicators and relationship of the indicators with the construct - suggested by Jarvis, Mackenzie et al. (2003). The first rule is *the direction of causality* between the MV and the LV, which is also the basic theoretical consideration between reflective and formative models. In the reflective model the causality is from the constructs to the indicators while in the formative model it is from the indicators to the constructs. This is illustrated in Figure 4.2 (Panel 1) where the unidimensional construct (η) is represented by a circle with several arrows originating from it to the three indicators. In the

formative model (Panel 2), the flow of arrows is from the indicators X_i to the construct η and γ_i is a coefficient capturing the effect of indicator X_i on the latent variable η and ζ represents all other possible causes that are not represented in the indicators (Diamantopoulos and Winklhofer 2001; Jarvis, Mackenzie et al. 2003; Coltman, Devinney et al. 2008; Westlund, Kallstrom et al. 2008; Cenfetelli and Bassellier 2009).

The second rule is *the interchangeability of the indicators*; the characteristics of the indicators that are used to measure the construct are different in the reflective and formative models. In the reflective model, the indicators are manifested by the construct and changes in the construct lead to changes in the indicators. So, the indicators should be internally consistent and conceptually interchangeable. Adding or removing an indicator may affect reliability but does not change the nature of the construct. In the formative model, the indicators define the construct and a change in the indicators lead to changes in the construct without necessarily affecting the other indicators. So, the construct is sensitive to the number and type of indicators used (Jarvis, Mackenzie et al. 2003; Coltman, Devinney et al. 2008; Franke, Preacher et al. 2008).

The third rule is *the covariation among the indicators*; expected in reflective but not necessary in formative models. For example, in our case a drop in the level of satisfaction with the depth of the products offered is not expected to bring any changes in the level of satisfaction with car parking or cleanliness of the store; a drop in the level of satisfaction with the cleanliness of

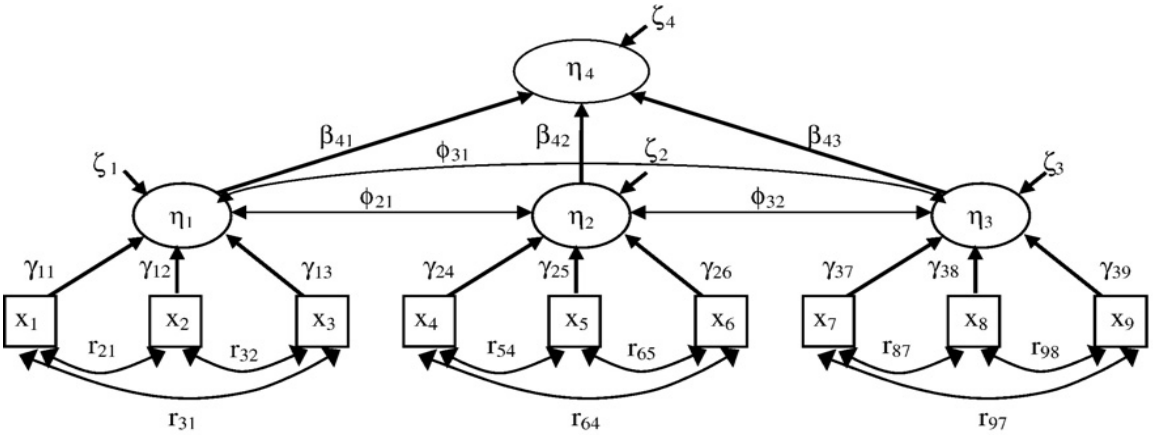
the store does not imply that there is any change in the level of satisfaction with the music inside the store.

The final rule is *the relationship of the indicators with the construct*. In the reflective model the indicators should not be different, they should have the same antecedents and consequences. In the formative model, the indicators do not need to have a similar relationship thus it is important to find a balance between the level of aggregation of the formative indicators and the level of diversity and richness that the indicators describe the construct (Diamantopoulos and Winklhofer 2001; Jarvis, Mackenzie et al. 2003). Using these rules, the formative measurement model was selected for this study and thus the appropriate type of analysis was followed.

Our model examines the relationship between the endogenous variable of SB purchases and the three exogenous variables of customer satisfaction, trust in SB, and word-of-mouth. However, the constructs of customer satisfaction and trust in SB are conceptualized and operationalized as multidimensional entities (Law, Chi-Sum et al. 1998). As is illustrated in Figure 4.4, there are a number of formative indicators (the observed variables) that are used to measure the three dimensions (first-order) and then we relate these dimensions to the (second-order) latent construct (Diamantopoulos, Riefler et al. 2008). The construct η_4 is a multidimensional aggregate construct, that is if we combine all dimensions, η_1, η_2, and η_3, we produce the construct. These three dimensions are not directly observable, instead they are constructs themselves and they are measured using formative indicators. If we deconstruct the model and allow all formative

indicators to be directly related to the model, this will result in a larger model and in a loss in parsimony. Furthermore, we might not obtain the same level of accuracy in our analysis of relationships since our measurement – with the deconstruction – will be at higher level (Petter, Straub et al. 2007).

Figure 4.4: Formative First-Order, Formative Second-Order



Source: (Diamantopoulos, Riefler et al. 2008)

Our definition of customer satisfaction emphasizes the evaluative process by which the response is determined rather than the construct itself. Therefore, in our model, we conceptualized the satisfaction with the service environment, the service delivery and the service product as three interrelated constructs (first-order constructs), which report different aspects of the customer satisfaction construct. Therefore, these first-order constructs can be grouped together to provide us with customer satisfaction (the second-order construct). In addition, we conceptualized the trust in food SB and the trust in non-food SB as two interrelated constructs that can provide us with an overall level of trust in SB. The overall measurement model as well as the formative indicators used to

measure the first-order constructs is illustrated in Table 4.14. In SmartPLS, the selected software application for this study, second-order constructs are measured using the repeated indicator approach. That is, we have reassigned all indicators given to the first order constructs to the second order.

Table 4.14: Emergent Measurement Model

Formative Indicators	First – Order Construct	Second – Order Construct
The cleanliness of the space	Service Environment	Customer Satisfaction
The signs on the aisles of the store		
The music inside the store		
Available employees for help/service	Service Delivery	
Frequency of expired products		
The prices are visible on the shelves		
The prices are the same on the shelves and at the cashier		
Frequency of out of stocks		
The size of the store	Service Product	
The distance from the house/work		
The parking		
Level of satisfaction with the width		
Level of satisfaction with the depth		
Luncheon Meat/Cheese	Trust in Food SB	Trust in SB
Soft drinks		
Dairy products		
Wine		
Beer		
Other food products		
Juices		
Detergents	Trust in Non-Food SB	
Shampoo & Bath foams		
Paper products		
Intention to recommend	W – O - M	

As we see in Table 4.14, thirteen formative indicators were used for the construct of customer satisfaction, ten formative indicators for the construct of trust in the SB and one for W-O-M. So, the above mentioned constructs are dependent variables and the formative indicators are the explanatory variables that may cause variance in their respective constructs (Diamantopoulos and Winklhofer 2001). The formative indicators are Likert scale items measuring each of the three constructs and were selected in such a way as to adequately describe the constructs.

4.7.5 Procedures for Assessing the Outer Model

In the previous section, we described the four decision rules that we used to select the type of measurement model and discussed the key differences between formative and reflective models. Diamantopoulos and Winklhofer (2001) point out several characteristics of the formative model, which make it quite different from the reflective model. They conclude that as a result of these characteristics the basic evaluation criteria used for reflective models – content validity, indicator reliability, construct reliability, convergent validity, and discriminant validity – are not appropriate for the formative model (Churchill Jr 1979; Diamantopoulos and Winklhofer 2001). In this section, we will describe the procedures used to assess the outer model.

The PLS algorithm measures the relationships between a latent variable (cause) and its indicators (effect). Furthermore, the PLS algorithm allows each indicator to have a different weight in how much it contributes to the composite

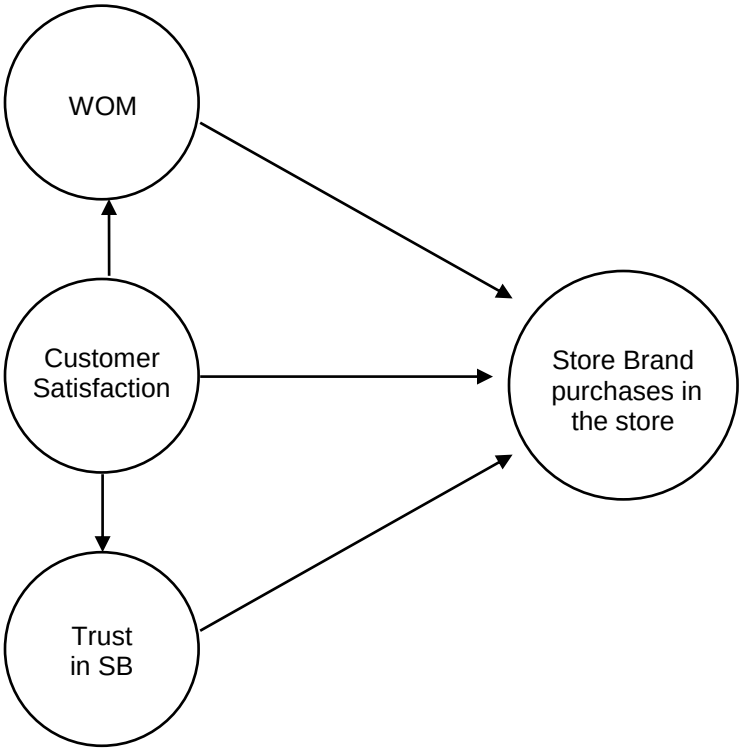
score of the latent variable. Therefore, we evaluated the outer model using the path weights to determine the relative importance of each indicator to the creation and formation of the LV; the lower the weight given to an indicator, the weaker its relationship to the construct (Chin, Marcolin et al. 1996). Furthermore, bootstrap resampling was performed to examine the significance of the weights.

Overall for the assessment and interpretation of the outer model results, the procedure suggested by Centefelli and Bassellier (2009) was used. Specifically, they identified six issues: (1) multicollinearity among the indicators, (2) the number of indicators used for a formatively measured construct, (3) the possible co-occurrence of negative and positive indicator weights, (4) the absolute and relative importance of an indicator to its construct, (5) nomological network effects, and (6) the possible effects of using PLS versus covariance-based SEM techniques.

4.7.6 PLS: The Inner Model

The inner model defines the causal relationships between the latent variables. It specifies the relationships between the unobserved or latent variables, both the exogenous and the endogenous, that were hypothesized in the research model (Henseler, Ringle et al. ; Duarte and Raposo 2010). In Figure 4.5, we can see the inner model of the study with four constructs and five linear relations. We hypothesize that the level of customer satisfaction, the level of trust in SB and word of mouth influence the level of SB adoption and penetration.

Figure 4.5: The Inner Model



4.7.7 Procedures for Assessing the Inner Model

The model specifies that through measuring customer satisfaction, trust in SB and word of mouth, we can predict the level of SB adoption and penetration. We have evaluated the inner model based on the meaningfulness and significance of the hypothesized relationships between the constructs. Specifically, we used the two key indexes that the PLS algorithm generates: the standardized coefficients between constructs (path coefficients), and the determination coefficient (R^2). The path coefficients provide the direct impact on the endogenous LV, in our case SB adoption, when there is a change in the exogenous LVs. The endogenous variable's determination coefficient (R^2) is an index that determines

the level of influence the exogenous variables have on the endogenous latent variable.

4.8 Overview of Chapter 4

This chapter described the overall methodological approach to the study, which provides the direction towards the fulfillment of the research objectives. First, it explains that the positivist paradigm was adopted and a cross-sectional type of survey was used due to the explanatory and descriptive nature of the study. Then, we detailed the data collection method employed, and the method through which respondents were contacted. Furthermore, we described the sampling design, explained that a quota sample of one hundred respondents for each of the nine grocery store retailers was chosen (total of 904 respondents) and provided information on the implementation of the survey. Finally, the procedures for analyzing the data obtained from the survey were justified as well as the procedures for testing the measurement and the structural parts of the research. SPSS was selected for the initial data analysis, and the PLS statistical technique for the more complex multivariate relationships between the observed and the latent variables.

CHAPTER 5: DATA ANALYSIS AND RESULTS

5.0 Introduction

Based on the theoretical model and the research questions and hypothesis developed in chapter 3, the measurement and structural model were specified. In the previous chapter, the researcher explained and justified the analytical procedures followed when analyzing the survey data. The selected techniques included univariate analysis of descriptive statistics, and bivariate analysis in the form of Chi-Square test, analysis of variance (one-way ANOVA), Friedman's ANOVA, and multivariate in the form of PLS. The statistical techniques used in the analysis of the survey data and for testing each of the hypotheses were presented in Table 4.10.

This chapter presents the results and tests for each hypothesis. The relationship between SB purchases and measures of store satisfaction, level of trust of SB, and intention to recommend the store to others (word-of-mouth) are assessed. First, information on the population from which the data sample was obtained is presented as well as information on the distribution of data to determine the adequacy of the statistical estimation procedure. Then, the research hypotheses are tested using the above-mentioned statistical techniques.

The presentation of the PLS results is in two phases. In the first phase, the outer model results are presented as well as an assessment of the reliability

and validity of the measures used for the representation of the constructs. In the second phase, the inner model is presented to provide support to our interpretation and conclusions. Finally the other statistical techniques selected for testing the rest of our hypotheses are presented. The final section of this chapter provides a summary of the results.

5.1 Characteristics of the Sample

A total of 904 respondents were interviewed, and as was described in the previous chapter, 100 respondents for each of the nine grocery chains were generated. The characteristics of the total sample are reported in Table 5.1 and in Table 5.2 the sample characteristics for each grocery chain are reported.

Women represent 77.4% of the whole sample and the majority of the respondents are in the 25–64 age group. Comparing the demographic characteristics of the sample with National Statistics and the data provided in Table 4.8, we note that women, and the 25–64 age group are over represented in the sample. This is to be expected since the target population is the person responsible for household grocery shopping. On average 25% of the respondents were in the 18 to 34 age group, although for Carrefour this figure was 35% and for Lidl 17%.

Table 5.1: Demographic Profile of the Respondents

Gender		Age		Area	
Male	22.6% (204)	18 - 24	8.3% (75)	Athens	68.7% (621)
Female	77.4% (700)	25 – 34	16.8% (152)	Thesaloniki	31.3% (283)
		35 – 44	22.3% (202)		
		45 – 54	24.9% (225)		
		55 – 64	27.7% (250)		
Marital Status		Education		Socio-economic Class*	
Married	74.8% (676)	No	2.9% (26)	A/B	5.0% (46)
Single	19.8% (179)	Low	15.2% (137)	C1	33.3% (301)
Divorced or Widow	5.4% (49)	Middle	36.4% (329)	C2	45.4% (410)
		High	15.9% (144)	D	15.3% (138)
		Higher	29.6% (268)	E	1.0% (9)

Note: Numbers are in percentages while in parenthesis are the absolute numbers

**Based on ESOMAR's description of the social grade categories. A/B: managers and professionals; C1: well educated non-manual employees and skilled workers; C2: skilled workers and non-manual employees; D: skilled and unskilled manual workers and poorly educated people in non-manual/managerial positions; E: less well educated skilled and unskilled manual workers, small business owners and farmers/fishermen.*

Respondents were also asked to provide information regarding their marital status and their level of education. Approximately three quarters of the sample were married, while 20% were single. The grocery chain with the highest percentage of married respondents was Lidl whilst the one with the lowest was Champion. In terms of education 45% had attended some form of higher education. The grocery chain with the highest educated respondents was AB - 63% of their respondents indicated that they have attended high or higher education. ESOMAR's social grade categories were used to identify the socio-

economic class of the sample. The majority of the sample is in the C2 social grade category (skilled workers/non-manual employees). The grocery chain with the respondents with the highest socioeconomic status was AB since 12% of the shoppers are in the A/B grade category.

Table 5.2: Demographic Profile of the Respondents by Grocery Chain

		Grocery Chain								
		AB	Atlantik	Veropoulos	Carrefour	Lidl	Champion	Masoutis	My Market	Sklavenitis
GENDER	Male	13	19	21	28	23	20	23	20	37
	Female	87	81	79	72	77	80	77	80	63
AGE	18 - 24	6	8	10	12	3	15	10	10	1
	25 - 34	18	15	13	23	14	14	20	17	18
	35 - 44	24	22	21	25	25	20	21	22	22
	45 - 54	29	24	26	16	30	27	23	27	22
	55 - 64	23	31	31	24	28	25	27	24	37
SOCIO	A/B	15	3	4	3	4	1	8	2	6
	C1	36	27	34	32	35	40	36	25	35
	C2	40	45	41	52	44	45	45	53	44
	D	9	22	21	13	16	14	12	17	14
	E	0	3	1	0	1	0	0	3	1
EDU_N	No	0	6	8	3	3	1	0	3	2
	Low	8	20	16	11	14	16	16	21	15
	Middle	29	36	35	40	42	38	33	44	31
	High	16	16	15	19	13	16	16	14	19
	Higher	47	22	27	27	28	29	36	18	33
STATUS	Married	75	79	79	74	80	65	75	68	78
	Single	20	19	13	25	10	32	22	21	16
	Divorced or Widow	5	2	8	1	10	3	3	11	6
Total		100	100	101	100	100	102	101	100	100

Note: Numbers are in percentages

5.2 PLS Results: Evaluation of the Outer Model

As discussed previously, PLS analysis is different when dealing with reflective or formative indicators. For constructs with reflective measures, the loadings are used and the measurement model is assessed by examining individual item reliability, internal consistency or construct reliability, average variance extracted analysis, and discriminant validity (Diamantopoulos, Riefler et al. 2008; Cenfetelli and Bassellier 2009; Duarte and Raposo 2010). Since in this study the formative measurement model was selected for all constructs a review on how formative measures are assessed is necessary.

Bollen (1989) and Bagozzi (1994) emphasize that traditional validity assessments and classical test theory do not apply to manifest variables that are used in a formative measurement model. In a formative model, the indicators do not need to be correlated with each other nor do they need to have high internal consistency such as Cronbach's alpha: the indicators do not have a common cause. Therefore, the concepts of reliability (i.e. internal consistency) and construct validity (i.e. convergent and discriminant) are not meaningful (Bollen and Lennox 1991).

Chin (1998a) suggests that the interpretation of LVs through formative indicators should be based on weightings. Comparison of loadings (λ) among indicators within a block of formative indicators would, however, be pointless because the intraset correlations for each block were not taken into consideration in the estimation process. As suggested by Chin (1998a), the loadings were used only to identify which indicator makes the best surrogate for the component

score. Therefore, the outer model was evaluated using the path weights to determine the relative importance of each indicator to the LV.

In order to test the reliability of the results, the analysis started with an assessment of the collinearity among the formative indicators (Cenfetelli and Bassellier 2009). The next step was to run bootstrapping, a re-sampling procedure, in order to test the significance of the PLS estimates and therefore their predictive validity (Chin 2010b).

5.2.1 Indicator Collinearity

In a formative model, the indicators must be correlated with the construct but they should not be correlated with each other. Multicollinearity is used to describe the situation when a correlation is detected between two or more predictor variables. High multicollinearity leads to duplication of measurement and to difficulties in assessing indicator reliability. (Diamantopoulos and Winklhofer 2001; Diamantopoulos, Riefler et al. 2008; Cenfetelli and Bassellier 2009). Thus, our first step in the interpretation of the outer model results is the evaluation of collinearity. Centefetelli and Bassellier (2009) suggest two ways to assess the degree of multicollinearity: the variance inflation factor (VIF) and the eigenvalue. Several researchers (e.g., Diamantopoulos and Winklhofer, 2001; Diamantopoulos, Riefler et al., 2008; Westlund, Kallstrom et al., 2008) recommend the use of the VIF. The VIF for each indicator suggests the possible presence of collinearity; the higher the VIF value the higher the collinearity and the more dificult it is to distinguish the influence of individual indicators on the LV.

Several researchers suggest indicator elimination based on different VIF values. A commonly accepted cut-off is a value of VIF>10 (Diamantopoulos, Riefler et al. 2008; Hair, Black et al. 2010) or 3.33 (Diamantopoulos and Singuaw 2006). Diamantopoulos and Winklhofer (2001) disagree with indicator elimination and point to the danger of changing the meaning of the construct. Specifically, they have stated that "*indicator elimination-by whatever means-should not be divorced from conceptual considerations when a formative measurement model is involved*" (Diamantopoulos and Winklhofer 2001)

The results indicate that the collinearity between the indicators that measure customer satisfaction is low; all VIFs are less than 3.02 (see Table 5.3), below the 3.33 acceptable value, which indicates no multicollinearity. Therefore, there is no conceptual overlap among the selected indicators and all customer satisfaction indicators were accepted. However, when assessing collinearity between the indicators that measure trust in SB, we have identified two indicators - wine and beer - with VIF of 5.8 and 6.7 respectively (see the shaded area in Table 5.3). So, there is a conceptual overlap between these two indicators. Furthermore, the researcher believed that since both indicators measure trust in SB products that are in the broader category of alcoholic beverages removal of any one of the two would not change the meaning of the construct. Therefore, following the recommendation of Cenfetelli and Bassellier (2010), it was decided to remove the beer indicator and retest for collinearity. After the removal of the collinear indicator, the test was run again and all VIFs had an acceptable value. Specifically, with the exception of wine (3.4) and soft drinks (4.1) all VIF's are

less than 4.2 see Table 5.3. Therefore, there is no collinearity between the indicators measuring trust in non-food SB and low collinearity between those that that measure trust in SB food SB.

Overall, the VIF's of all indicators measuring the constructs of customer satisfaction and trust in SB are between the 1.13 and 4.17 levels, indicating acceptable reliability and that all indicators are salient contributors to the "Store Satisfaction" and to the "Trust in SB" indexes.

Table 5.3: Multicollinearity among indicators

Customer Satisfaction - All indicators

Indicator	R	R Square	Adjusted R Square	Std. Error of the Estimate	VIF
Cleanliness	,533[a]	,284	,244	,539	1,396517
Signs on the aisles	,586[a]	,344	,307	,637	1,523906
Size of the store	,551[a]	,304	,265	,583	1,436929
Music in the store	,466[a]	,217	,173	,799	1,277436
Location	,261[a]	,068	,016	,818	1,073382
Parking	,489[a]	,239	,197	,928	1,314814
Width	,817[a]	,668	,649	,388	3,013545
Depth	,815[a]	,664	,645	,434	2,971915
Available employees	,561[a]	,315	,276	,722	1,459081
Visible prices	,678[a]	,459	,429	,530	1,848723
Price on the shelve = cashier	,545[a]	,297	,257	,750	1,422168
Out of Stock	,474[a]	,225	,181	,625	1,290113
Expired products	,344[a]	,118	,068	,475	1,133837

Trust in SB - All products

Indicator	R	R Square	Adjusted R Square	Std. Error of the Estimate	VIF
Trust on Luncheon Meat	,799[a]	,638	,633	,601	2,761158
Trust on Soft drinks	,879[a]	,772	,769	,492	4,388707
Trust on Detergents	,821[a]	,674	,669	,617	3,063825
Trust on Dairy	,839[a]	,703	,699	,545	3,372362
Trust on Wine	,909[a]	,827	,825	,426	5,782126
Trust on Beer	,923[a]	,852	,849	,392	6,738596
Trust on Shampoo & BF	,827[a]	,684	,679	,579	3,165362
Trust on Other Food	,799[a]	,639	,633	,622	2,767418
Trust on Paper pr.	,747[a]	,557	,551	,724	2,259252
Trust on Juices	,833[a]	,694	,690	,578	3,26805

Trust in SB - Beer eliminated

Indicator	R	R Square	Adjusted R Square	Std. Error of the Estimate	VIF
Trust on Luncheon Meat	,791[a]	,625	,620	,610	2,66877
Trust on Soft drinks	,872[a]	,760	,757	,505	4,170869
Trust on Detergents	,818[a]	,669	,665	,622	3,025606
Trust on Dairy	,839[a]	,704	,700	,546	3,381127
Trust on Wine	,842[a]	,708	,704	,555	3,427423
Trust on Shampoo & BF	,814[a]	,662	,658	,599	2,960744
Trust on Other Food	,800[a]	,641	,636	,621	2,78175
Trust on Paper pr.	,746[a]	,556	,550	,725	2,251842
Trust on Juices	,832[a]	,693	,689	,580	3,25738

5.2.2 The Number of Indicators and their Significance

In this section, we will provide an evaluation of how accurate the measures are. The number as well as the type of indicators used to measure the constructs has important implications. They affect both the statistical significance and the magnitude of each indicator's weight (Cenfetelli and Bassellier 2009). As it is suggested by Bollen and Lennox (1991), "*omitting an indicator is omitting a part of the construct*". Thus, we have included a large number of indicators in the model and we have selected them in such a way as to describe the construct. After the test for multicollinearity, there are thirteen indicators for measuring customer satisfaction and nine indicators for measuring trust in SB. The weights provide us with information about the composition and the relative importance of each indicator in the creation of the construct (Chin 1998a).

A usual problem when having a large number of indicators is that some of them may have low weights and because of that be interpreted as not significant (Cenfetelli and Bassellier 2009). It is indicated in Table 5.4, that most of the indicators measuring customer satisfaction and trust in SBs have rather low weights. Specifically, for the construct of customer satisfaction the indicators of location (0.04), parking (0.038), and music (0.057) and for the construct of trust in SB the indicators of dairy (-0.059), meat & cheese (0.014), and wine (-0.02) had a low weight and thus we might consider them as not significant.

Table 5.4: Assessment of Indicator Weights

INDICATORS MEASURING CUSTOMER SATISFACTION		INDICATORS MEASURING TRUST IN SB	
CLEANLINESS	0,356343	DAIRY	-0,059723
MUSIC	0,057811	JUICES	0,10408
SIGNAGE	0,109879	MEAT/CHEESE	0,014708
EMPLOYEES	0,188079	OTHER FOOD	0,187761
EXPIRED	0,157276	SOFT DRINKS	0,063702
PRICES 1	0,235419	WINE	-0,024205
PRICES 2	0,084926	DETERGENTS	0,076221
SHORTAGE	0,232984	PAPER PROD	0,32026
DEPTH	0,131756	SHAMP/BF	0,13724
LOCATION	0,044935		
PARKING	0,038003		
SIZE	0,17308		
WIDTH	0,465573		

Diamantopoulos and Winklhofer (2001) suggest that we may decide to remove nonsignificant indicators (one at a time) until all paths are significant and a good fit is obtained. Their suggestion is mainly for practical reasons since they acknowledge that "*from a theoretical perspective, elimination of indicators carries the risk of changing the construct itself*". In contrast, Bollen and Lenox (1991) suggest that one may retain nonsignificant indicators in order to ensure that the construct is adequately measured and to preserve content validity. Following their suggestion, it was decided to include all formative indicators that measure our specific constructs. However, in order to deal with the low weight issue, due to the large number of indicators, the approach suggested by Cenfetelli and Bassellier (2009) was used. Customer satisfaction and trust in SB were treated as second order constructs (see section 4.7.4, Table 4.14). This means that there is a lower number of indicators for each construct and the competition

among the indicators is lower. Therefore, there is higher probability that the indicators will be statistically significant. This is indicated in Table 5.5 where the weights of all indicators are higher than the ones in table 5.4.

Table 5.5: Measurement Model Results: Outer Weights and Significance

CUSTOMER SATISFACTION						
	ENVIRONMENT		DELIVERY		PRODUCT	
	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT
CLEANLINESS	1,178274	11,220				
MUSIC	0,133346	4,570				
SIGNAGE	0,310764	5,720				
EMPLOYEES			0,383864	4,518		
EXPIRED			0,56037	6,116		
PRICES 1*			0,544514	5,728		
PRICES 2**			0,167126	4,581		
SHORTAGE			0,26308	1,994		
DEPTH					0,288937	3,503
LOCATION					0,160404	2,117
PARKING					0,052936	1,659
SIZE					0,382188	4,172
WIDTH					0,952978	9,356
TRUST IN SB						
	FOOD SB		NON-FOOD SB			
	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT		
DAIRY	-0,046742	1,347				
JUICES	0,267586	6,939				
MEAT/CHEESE	0,062649	1,689				
OTHER FOOD	0,362108	8,423				
SOFT DRINKS	0,146802	3,670				
WINE	0,024745	0,740				
DETERGENTS			0,125495	2,934		
PAPER PROD			0,401638	4,917		
SHAMP/BF			0,248874	7,097		

* PRICES 1: The prices are visible on the shelves

** PRICES 2: The prices are the same on the shelves and at the cashier

A problem with PLS is that *"there is no statistical test of the overall model fit, nor are there standard errors of parameter estimates, so it is hard to evaluate*

model fit". It is suggested that "*this problem can be solved to some extent by bootstrapping"* (Grover and Vriens 2006). Therefore, in order to further test the significance of the indicators, we used bootstrapping (1000 samples, sample size 904) to calculate the *t*-values and to examine the significance of the weights (Chin 1998a). Ideally *t*-values should be higher than 1.96 to indicate significance ($p< 0.05$) but since responses come from humans and human tendencies might bias the results, we can also accept *t*-values higher than 1.65 ($p< 0.10$).

As we look at the weights and *t*-values associated with our model, we notice that the indicators of location, parking and music and the indicators of dairy, meat & cheese, and wine have either a very low impact or are not significant at all. All the other weights are quite high and all *t*-values for the indicators are significant ($t > 1.65$). These results provide evidence of the overall validity of our first-order formative measures.

Furthermore, the path coefficients indicate the importance of each first-order construct to the formation of the second-order construct. In Table 5.6, we see that satisfaction with the service product is the most important construct for store satisfaction followed by satisfaction with service delivery. For the trust in SB construct, trust in nonfood SBs is more important than trust in food SBs.

Table 5.6: Significance of First-Order Constructs to the Second-Order

	PATH COEFFICINET	*t* - STAT
CUSTOMER SATSIFACTION WITH THE:		
ENVIRONMENT	0.336	3.707
DELIVERY	0.454	4.108
PRODUCT	0.479	4.338
TRUST IN:		
FOOD SB	0.370	2.773
NON FOOD SB	0.687	6.373

5.3 PLS Inner Model Results: Testing H1, H3, H4, H5, H7

In the previous sections, we established the reliability and validity of the measures. In this section, we will provide evidence supporting the theoretical model as illustrated by the inner model (section 4.7.6). Since our model is based on formative measures, we do not provide for goodness of fit measures. *"Models with low R-square and/or low factor loadings can still yield excellent goodness of fit"* (Chin 1998b). We rather try to relate how well the endogenous latent variable is predicted. Chin (1998a) suggests the following criteria for assessing inner models: (a) the R^2 of endogenous latent variables, (b) the estimates for the path coefficients with bootstrapping to examine their significance, (c) the effect size f^2, and (d) the prediction relevance (Q^2 and q^2).

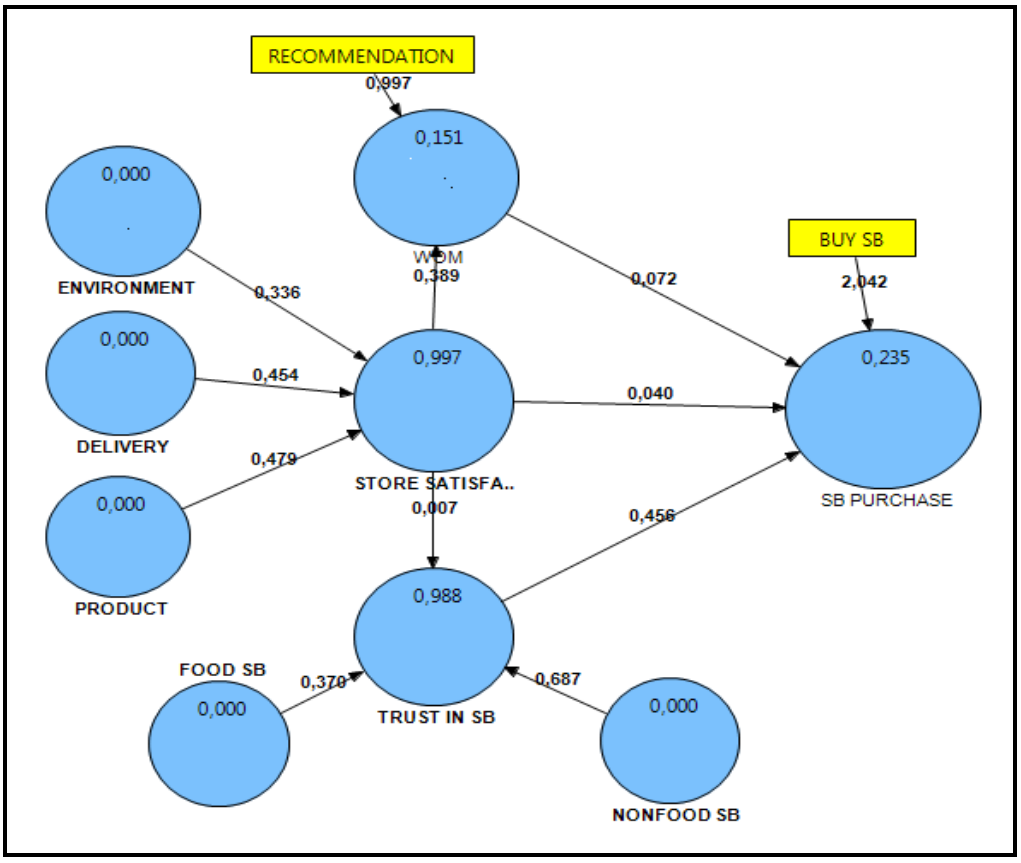
The last criterion for evaluating the predictive relevance is the predictive sample reuse technique, that is Q^2 which is calculated based on the blindfolding procedure. However, *"The blindfolding procedure is only applied to endogenous*

latent variables that have a reflective measurement model operationalization" (Henseler, Ringle et al. 2009). Therefore, we are not using the values of Q^2 *and* q^2 to assess the predictive relevance and the relative impact of each exogenous latent variable to the latent variable under evaluation.

As discussed previously, the predictive power of the model is assessed by the coefficient of determination value (R^2) of the endogenous construct, "SB purchase" as well as by the significance of all path coefficients. PLS R-square is an index that helps us to relate how well SB purchase (the dependent variable) is predicted by the overall model. Chin (1998a) suggests that R^2 values of 0.67 can be considered as substantial, values of 0.33 as moderate, and values of 0.19 as weak. Furthermore, a moderate R^2 value can be accepted when a few exogenous latent variables are used to explain an endogenous latent variable.

The results for this study indicate that the R^2 values of the endogenous reflective construct "SB purchases" are moderately acceptable in respect to the overall model. Specifically customer satisfaction, trust in SB and WOM explain approximately 24% of SB purchase variance. As far as the affect that customer satisfaction has on word-of-mouth, the path coefficient (0.389) as well as the *t*-value (10.88) indicate that customer satisfaction has a high impact upon word-of-mouth. In contrast, the path coefficient (0.007) as well as the *t*-value (1.72) indicate that customer satisfaction has a low impact upon trust in SB. Results are shown in Table 5.7 and a schematic representation of the results is provided in Figure 5.1.

Figure 5.1: Inner Model Results – H1, H3, H4, H5, H7



The second criterion for assessing the inner model is the values of the path coefficients that the PLS algorithm provides us with. These values should be evaluated in terms of sign and magnitude, and their significance is assessed through bootstrapping. The standardized path coefficients of the inner model indicate that “trust in SB” has the strongest relationship with the dependent variable while the constructs of customer satisfaction and word-of-mouth have a very small affect on SB purchases. Furthermore, they indicate a strong relationship between customer satisfaction and word-of-mouth and a weak relationship between customer satisfaction and level of trust in SB.

The change in *R*-squares was explored to identify the impact each latent variable had on the dependent latent variable. The results indicate that the level of trust in SBs has the highest impact on SB purchases. Furthermore, we calculate the effect size f^2, in order to specify the effect of the predictor latent variable at the structural level (Chin 1998a). The following equation depicts algebraically the procedure for calculating the effect size:

$$f^2 = \frac{R^2_{included} - R^2_{excluded}}{1 - R^2_{included}}$$

The $R^2_{included}$ is the value when customer satisfaction, trust in SB and WOM are used to predict SB purchases, that is 0.235. The $R^2_{excluded}$ values are provided in the table 5.7 below, that is 0.233 when customer satisfaction is omitted, 0.036 when trust in SB is omitted, and 0.230 when WOM is omitted. The effect size respectively is f^2 of 0.0026, 0.2601, and 0.0065.

In addition, the predictive power of the model is assessed for four out of the nine grocery retailers in order to identify any variations. Two foreign retailers (AB and Carrefour), one Greek retailer (Sklavenitis), and one hard discounter (Lidl) were selected. These four retailers were selected for their size, their heavy involvement in the development of SBs, as well as their overall strategy. Table 5.8 presents the inner model results for these four grocery chains. The constructs of customer satisfaction, trust in SB and WOM for the store explain SB purchase variance from 22% to 39%. Therefore, the total model results are confirmed for the selected grocery chains since the R^2 values of the

endogenous reflective construct “SB purchases” are also moderately acceptable in respect to the overall model for the four grocery chains.

Table 5.7: Inner Model Results – H1, H3, H4, H5, H7

Constructs	*Inner Model*	*Inner Model Excl. Customer Satisfaction*	*Inner Model Excl. Trust in SB*	*Inner Model Excl. WOM*
Dependent				
SB purchases (R^2)	.235	.233	.036	.230
Independent				
Customer Satisfaction	.040 (1.25)	--	.047 (1.21)	.066 (1.85)
Trust in SB	.456 (14.49)	.457 (14.85)	--	.469 (14.89)
Word-of-mouth	.072 (2.17)	.088 (2.83)	.165 (4.69)	--
		f^2 = .0026	f^2 = .2601	f^2 = .0065
Customer Satisfaction to word-of-mouth	.389 (10.88)			
Customer Satisfaction to trust in SB	.007 (1,72)			

Table 5.8: Inner Model Results for the four grocery chains

Constructs	*ALL RT*	*AB*	*Sklavenitis*	*Carrefour*	*Lidl*
Dependent					
SB purchases (R^2)	.235	.388	.218	.228	.290
Independent					
Customer Satisfaction	.040 (1.25)	-.051 (.31)	-.069 (.39)	.026 (.20)	-.040 (.24)
Trust in SB	.456 (14.49)	.587 (4.42)	.391 (1.73)	.451 (5.23)	.550 (4.24)
Word-of-mouth	.072 (2.17)	.143 (1.21)	.226 (2.10)	.088 (0.94)	.015 (.16)
Customer Satisfaction to word-of-mouth	.389 (10.88)	.515 (3.42)	.519 (2.80)	.298 (2.02)	.307 (2.02)
Customer Satisfaction to trust in SB	.007 (1.72)	.011 (.46)	.009 (.50)	.006 (.34)	.009 (.50)

Overall these results suggest that H1, H3 and H7 cannot be supported. We cannot support that customer satisfaction (H1) and word-of-mouth (H7) have a strong impact on SB purchases, nor that customer satisfaction has a strong impact of the level of trust in SB (H3). Moreover, we find a significant positive impact of the level of trust in SB on SB purchases, and of customer satisfaction on word-of-mouth. Consequently, we find support for the affect of customer satisfaction on word-of-mouth (H4) and for the affect of the level of trust in SBs on SB purchases (H5).

5.4 Chi-square for independence: Testing H2

In this section, we present the results of testing, H2: *Customer satisfaction affects the variety of store brand purchases*. Our data analysis revealed that SB buyers make their purchases from a relatively low number of product categories. Specifically, on average SB buyers have indicated that they buy from 3.4 different product categories out of the 10 prompted categories. Furthermore, out of the 543 respondents that indicated that they purchase SB, only 10% purchased more than 8 SB product categories while 50% purchased only one or two (Figure 5.2).

We have hypothesized that there is a relationship between the level of satisfaction with the store and the variety of SB purchased. Therefore, a crosstabulation for these two variables was conducted. The level of satisfaction was measured with the thirteen attributes described in chapter 3 (Table 3.1).

However, when using all thirteen attributes the valid cases were 226 out of the 904 (678 missing cases). The statistical tests are based on all the cases with valid data in the specified ranges for all variables. Those cases with missing values are treated as missing. Specifically, the following attributes had a high number of missing values: (a) the level of satisfaction with the music in the store, (b) the prices are the same on the shelves and at the cashier, and (c) the parking. Therefore, these three attributes were excluded from our crosstabulation, and we had 718 valid cases (Table 5.9).

Figure 5.2: Number of Store Brand categories purchased

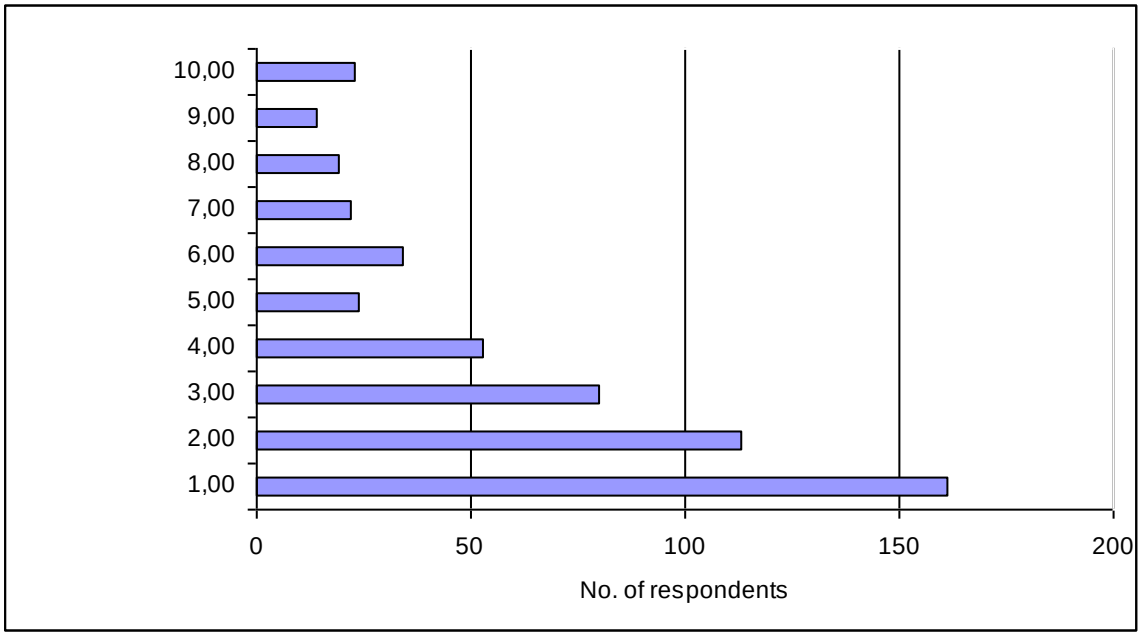


Table 5.9: Number of Cases for crosstabulation

Cases					
Valid		Missing		Total	
N	Percent	N	Percent	N	Percent
718	79,4%	186	20,6%	904	100,0%

The results of the crosstabulation are shown in Table 5.10 and the chi-square tests in Table 5.11. Overall the results indicate high levels of customer satisfaction for the respective stores, which is to be expected as respondents were selected on the basis of preferred store. That is, approximately 83% of the respondents (48.1% plus 34.7%) indicated that they were either satisfied or very satisfied with the store. We also see from the crosstabulation (Table 5.10) that in total 249 respondents (34.7% of total) indicated that they were very satisfied with the store and of these 55 (22.1%) are heavy purchasers of SBs. Furthermore, only 19 respondents (2.6% of total) indicated that they were unsatisfied with the store and of these 10 (52.6%) are not SB buyers.

Pearson's chi-square test examines whether there is an association between the level of customer satisfaction and the variety of SB purchased, that is between two categorical variables. One assumption of the chi-square test is the independence of data. The other is that the expected frequencies in any cell should be greater than 5 although it is acceptable in large contingency tables to have up to 20% of expected frequencies below 5 but not below 1 (Diamantopoulos and Schlegelmilch 1997; Field 2009). Therefore, our test is valid since there are only 3 cells with a count of less than 5. The value of the chi-square statistic and the degrees of freedom are given in Table 5.11. The significance value was taken from the critical values of the chi-square distribution table.

Table 5.10: Variety of Store Brand purchased–Level of Customer Satisfaction, Crosstabulation

Level of SBs Bought		Customer Satisfaction Categories*				Total
		1,00	2,00	3,00	4,00	
NON BUYERS	Count	10	53	129	87	279
	% within LEVEL OF SBs BOUGHT	3,6%	19,0%	46,2%	31,2%	100,0%
	% within Categories	52,6%	50,5%	37,4%	34,9%	38,9%
LIGHT BUYERS (1 Category)	Count	4	15	64	50	133
	% within LEVEL OF SBs BOUGHT	3,0%	11,3%	48,1%	37,6%	100,0%
	% within Categories	21,1%	14,3%	18,6%	20,1%	18,5%
MEDIUM BUYERS (2 - 3 Categories)	Count	2	22	72	57	153
	% within LEVEL OF SBs BOUGHT	1,3%	14,4%	47,1%	37,3%	100,0%
	% within Categories	10,5%	21,0%	20,9%	22,9%	21,3%
HEAVY BUYERS (4+ Categories)	Count	3	15	80	55	153
	% within LEVEL OF SBs BOUGHT	2,0%	9,8%	52,3%	35,9%	100,0%
	% within Categories	15,8%	14,3%	23,2%	22,1%	21,3%
TOTAL	Count	19	105	345	249	718
	% within LEVEL OF SBs BOUGHT	2,6%	14,6%	48,1%	34,7%	100,0%
	% within Categories	100,0%	100,0%	100,0%	100,0%	100,0%

* Customer satisfaction values:
1 = Unsatisfied, level of satisfaction 1 - 2,3
2 = Little satisfied, level of satisfaction 2,4 - 2,8
3 = Satisfied, level of satisfaction 2,9 - 3,4
4 = Very Satisfied, level of satisfactio 3,5 – 4,0

The results suggest that H2 cannot be supported since the level of significance is higher than 5%, X^2 = 11,871, df 9, sig. 0.1. Therefore, we can conclude that there are no statistically significant differences among different levels of customer satisfaction and the variety of SB purchased.

Table 5.11: Results of Chi-Square Tests – H2

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11,871[a]	9	,221
Likelihood Ratio	12,139	9	,206
Linear-by-Linear Association	5,914	1	,015
N of Valid Cases	718		

a. 3 cells (18,8%) have expected count less than 5. The minimum expected count is 3,52.

5.5 Friedman's ANOVA: Testing H6

In this section, we present the results of testing hypothesis H6: *The level of trust in Store Brands varies amongst product categories.*

As indicated in table 5.12, overall the average level of trust in SBs is very low (1,97) with non-food exhibiting a higher level of trust than food SBs (2,25 versus 1,89). The category with the highest level of trust is paper products, which is explained by the high penetration of this product category. Noteworthy is the high variation in the number of missing cases per product category which ranges from 192 to 94 in the case of wine and paper products respectively. All cases with either missing values or where respondents indicated "don't know/don't remember" or "doesn't have" were treated as "missing". The high level of missing values is possibly due to low SB penetration levels for some of these categories (e.g. wine, dairy, shampoo).

Table 5.12: Average Level of Trust in Store Brand by product category

	Mean*	sd.	Valid	Missing
Trust in Non-Food SB	2,25	0,95	723	181
Detergents	2,28	1,11	790	114
Shampoo/BF	2,01	1,07	751	153
Paper products	2,59	1,07	810	94
Trust in Food SB	1,89	0,88	644	260
Meat and Cheese	1,92	1,05	767	137
Soft drinks	1,99	1,07	753	151
Dairy	1,89	1,04	747	157
Wine	1,89	1,06	712	192
Other food	2,27	1,05	803	101
Juices	2,01	1,08	764	140
Trust in SB	1,97	0,86	628	276

*1 = do not trust at all, 4 = trust a lot

Table 5.13 shows the mean ranks in each condition. It demonstrates that there are variations in the ranks across the conditions. Overall, the results indicate that there is a significant difference between the median level of trust within the 9 product categories, X^2 = 581.203, df 9, p< 0.001. Therefore, H6 can be supported.

Table 5.13: Results for Friedman's ANOVA – H6

	N	Mean*	Std. Deviation	Percentiles 50th (Median)	Mean Rank
Meat and Cheese	622	1,80	,992	1,00	5,03
Soft Drinks	622	1,88	1,022	1,00	5,29
Detergents	622	2,13	1,072	2,00	6,03
Dairy	622	1,78	,993	1,00	4,99
Wine	622	1,82	1,017	1,00	5,11
Beer	622	1,85	1,009	1,00	5,23
Shampoo/BF	622	1,87	1,022	1,00	5,28
Other Food	622	2,08	1,027	2,00	5,85
Paper	622	2,43	1,080	3,00	6,87
Juices	622	1,90	1,038	1,00	5,33

*1 = do not trust at all, 4 = trust a lot

5.6 Analysis of Variance: Testing H8 and H9

In this section, we present the results of testing H8 and H9.

H8: *Store Brand adoption and penetration varies across different retailers*, and
H9: *The level of trust in Store Brands will vary by retailer.*

In testing the above hypotheses, we need to compare differences across the nine different retailers that we have in our quota sample. Therefore, we are comparing nine different groups of respondents and the level of measurement is interval. As it was explained in section 4.7.2, ANOVA was undertaken in order to test these hypotheses.

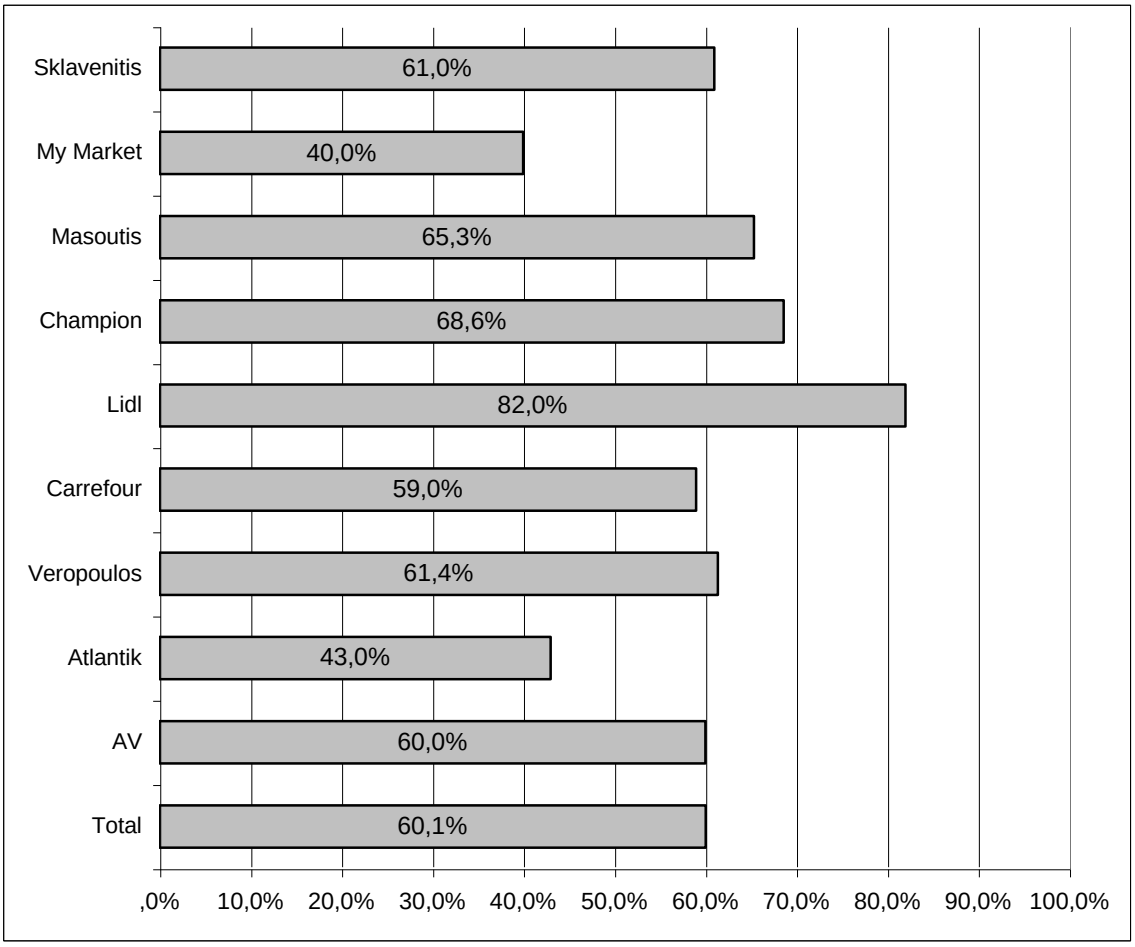
ANOVA provides us with the sum of squares and the mean squares. It tests the null hypothesis that is whether the means for all the nine retailers are the same. The alternative hypotheses is that at least one mean is different from the others. The sum of squares and the mean squares represent the overall experimental effect. The test of whether the group means are the same is represented by the *F*-ratio but ANOVA does not provide specific information as to how these means differ. In the next paragraphs, the ANOVA output for the two above-mentioned hypotheses will be presented.

5.6.1 One-Way ANOVA: Testing H8

Figure 5.2 illustrates that there are variations in the level of SB adoption among grocery retailers. As expected, the grocery chain with the highest SB adoption is Lidl with an 82% of the respondents indicating that they purchase SB, whereas some smaller Greek grocery chains (e.g. My Market, Atlantik) have the lowest level of SB purchase.

In testing H8, we need to compare differences in the level of adoption and penetration ("SB variety") across the nine different retailers. The "SB variety" variable was explained in section 4.7.2. Its value can range from zero that indicates no SB adoption to a maximum of ten depending from the number of SB product categories purchased.

Figure 5.3: Store Brand adoption by Grocery Chain



The results of the one-way ANOVA tests are presented in Table 5.14. The table provides some descriptive statistics such as the group means, standard deviation, standard error, and minimum/maximum values. In addition,

95% confidence intervals for each group means are indicated. For example, there is a 95% confidence that the true value of the "SB variety" mean for Carrefour is likely to be between 1.44 and 2.42. The sum of squares and the mean squares represent the overall experimental effect. The test of whether the group means are the same is represented by the *F*-ratio (Diamantopoulos and Schlegelmilch 1997).

Table 5.14: Results for One-Way ANOVA - H8

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	477,861	8	59,733	9,597	,000
Within Groups	5570,819	895	6,224		
Total	6048,680	903			

Group	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
AB	100	1,6500	2,14794	,21479	1,2238	2,0762
Atlantik	100	1,3600	2,32475	,23247	,8987	1,8213
Veropoulos	101	2,1188	2,66941	,26562	1,5918	2,6458
Carrefour	100	1,9300	2,48736	,24874	1,4365	2,4235
Lidl	100	3,9100	3,29093	,32909	3,2570	4,5630
Champion	102	2,2843	2,47513	,24507	1,7982	2,7705
Masoutis	101	1,9010	2,24724	,22361	1,4574	2,3446
My Market	100	1,5000	2,55643	,25564	,9927	2,0073
Sklavenitis	100	1,5100	2,03750	,20375	1,1057	1,9143
Total	904	2,0188	2,58813	,08608	1,8499	2,1877

The total amount of variation within the data is captured by the total sum of squares and is the difference between each respondent's data and the grand mean. This is calculated as: $SS_T = \sum\left(\bar{x}_i - \bar{x}_{grand}\right)^2$, where $\bar{x}_i$ is the data from each respondent, and $\bar{x}_{grand}$ is the variation between all scores from all nine

different retailers. From the data, $SS_T = 6048.680$ with *df* = 903 (N – 1, N is the total sample size).

To identify how much of this variation can be explained by the different groups, the *F* – ratio compares the amount of systematic variance in the data to the amount of unsystematic variance (Diamantopoulos and Schlegelmilch 1997; Field 2009). One estimate of variance comes from the variability of the observations *within* each group and the other estimate comes from the variability *between* the group means. The *within*-group variability is captured by the residual sum of squares and is calculated as: $\mathrm{SS}_R = \sum\left(\bar{x}_{ik} - \bar{x}_k\right)^2$, where $\bar{x}_{ik}$ is the score obtained by a respondent and $\bar{x}_k$ is the mean of the group to which the respondent belongs. From the data, the SS_R = 5570.819 with *df* = 895 ($N - k$). The *between*-group variability is captured by the model sum of squares and is calculated as: $\mathrm{SS}_M = \sum n_k \left(\bar{x}_k - \bar{x}_{grand}\right)^2$, where $\bar{x}_k$ is the mean of each group, $\bar{x}_{grand}$ is the grand mean and n_k the number of respondents within the group. From the data, the SS_M = 477.861 with *df* = 8 (k –1, k is the number of groups). The model sum of squares tells us how much of the variation can be explained while the residual sum of squares tells us how much of the variation cannot be explained by the model. These two values have different *df*, so we divide each value by the *df* to calculate the mean squares. Finally, the *F*-ratio is: *F* = $\frac{\text{between-groups mean square}}{\text{within-group mean square}}$. If the null hypothesis is accepted, the *F*-ratio should be close to 1. Our result indicate that there is a significant variation on

the “SB variety” across the different retailers, *F* (8,895)= 9.597, p<0.001. Therefore, we can support H8.

5.6.2 One-Way ANOVA: Testing H9

In this section, we present the results of testing hypothesis H9: *The level of trust is SBs will vary by retailer*. In testing this hypothesis, we need to compare differences in the level of trust in SB across the nine different grocery retailers. As was explained in section 4.7.2, the level of trust in SB is measured as the average level of trust across the 10 SB product categories selected. The mean for the average level of trust in SB can range from a minimum of 1 to a maximum of 4. The results of the one-way ANOVA tests are presented in Table 5.15 in addition to some descriptive statistics.

It is worth noting that the average level of trust in all grocery retailer SB is less than 2 (1,97), indicating a low level of trust in SB. Lidl has the highest average level of trust (2,47) of all nine retailers. Our results indicate that there is a significant variation in the level of trust in SB across the different retailers, F(8,619) = 4.023, p<0.001. Therefore, H9 can be supported.

Table 5.15: Results of One-Way ANOVA – H9

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22,813	8	2,852	4,023	,000
Within Groups	438,795	619	,709		
Total	461,608	627			

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
AB	76	1,8406	,81110	,09304	1,6553	2,0260
Atlantik	72	1,7731	,85080	,10027	1,5732	1,9731
Veropoulos	65	2,0564	,86894	,10778	1,8411	2,2717
Carrefour	66	1,9158	,93004	,11448	1,6872	2,1445
Lidl	71	2,4664	,81986	,09730	2,2723	2,6604
Champion	68	1,9461	,78226	,09486	1,7567	2,1354
Masoutis	77	1,9105	,82620	,09415	1,7230	2,0981
My Market	69	1,9501	,85081	,10242	1,7457	2,1545
Sklavenitis	64	1,9080	,83912	,10489	1,6984	2,1176
Total	628	1,9728	,85803	,03424	1,9055	2,0400

5.7 Overview of Chapter 5

This chapter presents the findings from the data analysis and tests of the hypotheses. The characteristics of the sample are presented followed by the results from the statistical tests.

First the results of the PLS analysis were reported. Based on the theoretical and empirical considerations, the outer model was modified, due to existence of multicollinearity in the two indicators that measure trust in SB. Bootstrapping was run to examine the significance of the weights and to evaluate the overall model fit. Overall the results indicate acceptable reliability and validity of the formative measures. Second the results of the inner model were reported

which provided a testing of H1, H3, H4, H5, and H7. The model provides moderate predictive validity and suggests that H1, H3, and H7 cannot be supported while H4 and H5 can be supported.

Finally the remaining research hypotheses in the model were examined. Overall, H6, H8, and H9 were supported whilst H2 could not be supported.

CHAPTER 6: DISCUSSION, IMPLICATIONS & CONCLUDING REMARKS

6.0 Introduction

In this final chapter, the contribution and the summary of the study are presented, and conclusions are drawn from the main findings and on the theoretical implications of the research. Furthermore, the managerial implications are discussed from both the retailer's, and the manufacturer's perspective. Finally, the limitations of the study and opportunities for future research are discussed.

6.1 Contribution and Summary of the Thesis

Our literature review revealed a plethora of studies on the driving forces behind SB growth. None of these studies explored the role of the retailer to the SB adoption and penetration. This study, therefore, attempts to investigate the role of the retail brand and examines different factors influencing the adoption and penetration of SBs amongst different retailers in Greece. Specifically, previous studies led us to expect a cause and effect relationship between CS, the level of trust in SBs, WOM and SB purchases. The main finding of our study, contrary to much evidence from literature in other markets, is that trust in SBs is more important as a predictor of SB sales than CS and loyalty with the store. Furthermore, CS with the store cannot be used to predict the level of trust in SBs. This disconfirmation is the primary contribution of this study. So, this study using

a large and reliable sample determined that the level of trust in SBs is the single most important driver for SB purchases in Greece.

While the importance of SBs has been recognized by researchers, and a number of studies have tried to explain the uneven growth of SBs across product categories (Hoch and Banerji 1993; Hoch 1996; Ainslie and Rossi 1998; Batra and Sinha 2000; Cotterill, Putsis Jr et al. 2000), and across retailers (Richardson, Jain et al. 1996a; Dhar and Hoch 1997), the majority of these studies limit their focus to a small number of retailers and to a limited number of product categories. This study presents evidence for a large number of retailers and for a variety of product categories. The model was tested across nine different grocery retailers and across ten different product categories of SBs. These nine retailers control more than 70% of grocery sales in Greece and 100% of SB sales and each one has a different retail branding strategy and a different SB positioning. The ten different SB product categories, included in the model, were selected from both food and non-food.

The study was organized into seven chapters. The introductory chapter aimed to set the setting for the study. It presented the justification for the study, and focused on the lack of knowledge on predicting SB purchases as a result of customer satisfaction, trust and WOM. In addition, it presented the aim of the study and the research objectives and concluded by giving an overview of the study's structure.

In order to develop an understanding of the concepts and issued involved, an integrative literature review was undertaken. The literature review was

presented in two chapters. The first, (Chapter two), explored the retailer brand concept and the development of store brands and was organized into three sections. The first section explored existing studies on the different categories of brands and the benefits of branding. The second focused on branding at the retailer level, the development of the retailer as a brand, and the development of retail brand image. In the last section, the existing literature on SBs was examined. Existing research suggests that SBs are an important element of an overall retail brand strategy and that SBs are used by retailers as a way to differentiate themselves, to build a competitive advantage over other retailers, and to achieve loyalty to their store.

Chapter three examined studies in the marketing literature relevant to SBs and identified the research gaps that provided the rationale for the study. Following this review, five research studies were reviewed in depth and provided the theoretical justification for the development of the conceptual model underpinning the study. The conceptual model included the constructs of customer satisfaction, level of trust in SBs, and WOM. A further literature review was then conducted in the areas of customer satisfaction, trust, and WOM. The aim was to define and identify measurements for each of the above-mentioned constructs. Finally, the chapter concludes by presenting the theoretical propositions that indicate the inter-relationships of customer satisfaction, trust, WOM and how they impact SB purchases.

Chapter Four explained the overall methodological approach to the study and presented in detail the research methodology employed. The positivist

paradigm was adopted and a cross-sectional type of survey was conducted. The effects were measured through an empirical study based upon respondents from eight general grocery retailers and one discount grocery store. The data was collected using a structured questionnaire and generated by telephone interviews. All independent variables in the model were measured using a four-point Likert scale. The questionnaire was designed in Greek and then translated into English for the thesis. The Greek version was pilot tested with personal interviews in order to correct possible problems. The target population was those adults responsible for household grocery shopping and who shopped in any of the nine leading grocery retailers selected. Using a non-proportionate quota sample, 100 respondents for each of the nine grocery retailers were generated; consequently the total sample size was 904 respondents.

In the last section of chapter four, the statistical techniques and procedures for data analysis were described and justified. This discussion was based on the research objectives, the type of analysis required, the level of measurement, the sample size, and the distribution of data. Procedures for the assessment and assumptions concerning univariate analysis (for descriptive statistics), bivariate analysis (in the form of Chi-square, ANOVA, Friedman's ANOVA), and multivariate analysis (PLS) were discussed. SPSS version 17.0 was used for both univariate and bivariate data analysis, while for the multivariate analysis, data were imported to SmartPLS for processing. For the PLS analysis, a structural model was developed, and analyzed to test the hypotheses.

Significance testing of the PLS parameters was based on bootstrapping procedures.

Having established the methodology for the study, the next chapter begun with the demographic profile of the respondents. In the rest of chapter five, the research findings were presented and the hypotheses shown in table 6.1 were tested. Chapter six concludes the study. In the following section, the theoretical implications of the research findings are discussed.

Table 6.1: Summary of Research Results

Hypothesis	Result
H1: Customer Satisfaction affects Store Brand purchases	Not supported
H2: Customer Satisfaction affects the variety of Store Brand purchases	Not supported
H3: Customer Satisfaction affects the level of trust in Store Brands	Not supported
H4: Customer Satisfaction affects word-of-mouth	Supported
H5: The level of trust in Store Brands affects Store Brand purchases	Supported
H6: The level of trust in Store Brands varies amongst product categories	Supported
H7: Word-of-mouth affects Store Brand purchases	Not supported
H8: Store Brand adoption and penetration varies across different retailers	Supported
H9: The level of trust in Store Brands will vary by retailer	Supported

6.2 Theoretical Implications of the Research

This section discusses the major findings of this study and provides a review of the theoretical implications arising from the findings. In addition, an analysis of the possible reasons why some of the hypotheses were not supported is also provided.

6.2.1 Prediction of Store Brand Purchases

The overall aim of the study was to explore the reasons for SB adoption and to assess how the retailer's overall strategy – reflected in consumer perceptions of the retailer - affects SB proneness. Specifically, the study sought to assess the impact of customer satisfaction, trust in SBs, and WOM as drivers of SB purchases, and through that to explain reasons for observed differences in levels of SB adoption amongst the retailers. This is considered the most significant finding of our study.

Our results suggest that the overall model provides moderate predictive power for the above variables with respect to SB adoption and penetration. The total model, presented in Table 6.2, can explain 24% of the variations in SB purchases in the store. Among the variables tested, the level of trust in SBs is the variable with the highest predictive validity while the CS with the store and WOM do not affect consumers' purchases of SBs and therefore are not safe predictors of SB purchases. While the variables tested in the study can by no

means be considered the only ones that can accurately predict SB performance, they can provide a good yardstick of how customers will react with regard to their decision-making based upon their attitude towards the store and towards the SBs.

While many researchers consider customer satisfaction as a key construct predicting consumer behavior (Oliver 1980; Anderson and Sullivan 1993; Bloemer and Kasper 1995; Binninger 2008), the present study provides with some new information concerning the effect of CS to SB adoption and penetration. Our findings (Table 6.2) indicate that CS with the store does not have a positive affect on behavioral attitudes as well as consumer evaluations towards SBs.

This finding might seem to contradict the findings of Semijn, et al. (2004) but could be explained by perceived risk. The data indicate that consumers did not trust SBs (1.97 was the average level of trust in all SB product categories and across all nine retailers) so the perceived risk associated with SBs was high. Semeijn, et al. (2004) found that perceived risk mediates the effect of store image on SB attitudes. Therefore, the low impact of CS on SB purchases can be explained by the overall low level of trust in SBs, i.e. the perceived risk associated with the purchase of SBs. A positive attitude towards the store, which is expressed through high levels of CS, does not decrease the perceived risk associated with SBs in the Greek market context.

The present study also provides some new information concerning the influence of store loyalty to the buying behavior of SBs. Previous research

suggests that satisfaction with the store and intention to recommend the store to others (WOM) are both determinants of loyalty (Bloemer and de Ruyter 1998; Ranaweera and Prabhu 2003; Shu-Ching and Quester 2006). This study provides evidence that CS and WOM do not affect SB purchases; therefore it suggests that loyalty to the store cannot be used to predict SB sales. The findings suggest (table 6.2) that both relationships are found to be extremely weak and therefore, not statistically significant. The directionality though was in accordance with the hypotheses. Therefore, it is suggested that the transfer of positive attitude towards the retailer (PWOM) to the behavioral attitude towards the retailer's SBs is not likely to occur.

This prompted further investigation into the relationship between the two constructs. There is a body of literature that postulates a positive relationship between customer satisfaction, loyalty and WOM (Zeithaml, Berry et al. 1996; Ranaweera and Prabhu 2003). Some of these studies declare that there are variations in these relationships among the different types of retail stores. Rocereto and Mosca (2012) indicate that the transference of the retailer's image to SB image *"is not likely to occur with the setting of retail stores which carry different manufacturer product brands"*. This study included grocery retailers that sell many different manufacturer brands and the retailer's SBs. Consumers' perceptions towards the retailer's brand name are not being transferred to the perceptions of the SBs that the retailer carries. Hence, the WOM for the retailer does not influence SB purchases and cannot be used to predict SB purchases.

Overall, a favorable attitude towards the store does not seem to influence attitudes towards the SBs of the store. Specifically, the findings reveal that attitudinal metrics at the retail level are not strong predictors of customers' behavior towards the retailer's SBs as noted by the modest R-square. This can be explained with previous research findings that suggest that SBs are perceived as a product category in their own right, and that consumers do not necessarily expect grocery retailers to offer SBs (Martenson 2007).

Another important finding of our research is that the level of trust in SBs has the highest impact on SB purchases. Specifically, the results of the model presented in Table 6.2, indicate that the level of trust in SBs has the highest explanatory power (0.456) and the strongest impact on SB sales; suggesting that an increase in the level of trust in SBs will have the effect of increasing SB purchases. This relationship was further tested with the calculation of the change in R-squares. When CS was omitted from the model the predictive power had only a slight decrease (R-square from 24% to 23%).

In addition, previous researchers suggest that trust is a central variable to the development of brand loyalty (Morgan and Hunt 1994; Garbarino and Johnson 1999). Thus, we can infer that, when the level of trust in SBs increases, the loyalty towards the SBs will also increase.

One more important finding of our study is that even though there are variations in the predictive power of the model across different retailers, the general direction and strength of the model is similar. Responding to the need identified by Semeijn et al. (2004) to test models with data from a large number

of retailers and from a wide range of product categories, our analysis was based on data collected from nine different retailers and included 10 different SB product categories. Each one of these retailers has developed a different image in the consumer's mind and a different SB strategy. For example, AB Vasilopoulos and Carrefour show their retail brand name on their SB packaging and follow a family brand policy for their SBs (e.g. AB uses the brand name "AB" in several product categories). On the other hand, Sklavenitis and Lidl use several different "phantom" brand names in their SB product categories and their retail brand name is revealed only in the legal declarations on the back of the pack. Table 6.2 presents the structural model results aggregated over all grocery retailers as well as the results for four selected retailers. Looking at the selected retailers, the predictive power of the model ranges from 39% in the case of AB, to 22% in the case of Sklavenitis.

Table 6.2: Structural model results estimated with PLS: variance explanations and standardized path coefficients

	Total (all 9 RT)	
Variance explanations, PLS: R^2	0.24	
Path	Standardized path coefficients	*t* – value*
CS → SB purchases	0.040	1.251
CS → Trust in SB	0.007	1.722
CS → WOM	0.389	10.880
Trust in SB → SB purchases	0.456	14.489
WOM → SB purchases	0.072	2.170

	AB		Carrefour		Sklavenitis		Lidl	
Variance explanations, PLS: R^2	0.39		0.23		0.22		0.29	
Path	Standardized path coefficients	*t* – value*	Standardized path coefficients	*t* – value*	Standardized path coefficients	*t* – value*	Standardized path coefficients	*t* – value*
CS → SB purchases	-0.051	0.311	0.026	0.195	-0.069	0.391	-0.040	0.236
CS → Trust in SB	0.011	0.482	0.006	0.344	0.009	0.496	0.009	0.504
CS → WOM	0.515	3.421	0.298	2.023	0.519	2.795	0.307	2.017
Trust in SB → SB purchases	0.587	4.416	0.451	5.238	0.391	1.731	0.550	4.237
WOM → SB purchases	0.143	1.210	0.088	0.940	0.226	2.104	-0.015	0.158

Note: *PLS *t* – values are based on bootstrapping with 1000 samples

6.2.2 Factors Influencing Customer Satisfaction

Retailers possess and exclusively sell their own SBs. But to what extent do consumers use the grocery store that owns them as a potential cue for making inferences about the SBs? From previous studies we believe that store image has a positive influence on SB penetration, and that store image perceptions positively influence consumer's judgment of SB quality (Collins-Dodd and Lindley 2003; Semeijn, Van Riel et al. 2004). In addition, Richardson et al. (1996) have shown that store aesthetics are used as cues in the formation of perceptions of SB quality. But what store image attributes are the most influential? Customer Satisfaction is one of the determinants of store image (Pappu and Quester 2006). Therefore this study hypothesized that customer satisfaction with the store (CS) affects SB adoption, the level of SB penetration, the level of trust in SB, and the intention to recommend the store to others (WOM).

The findings (Table 6.3) indicate that CS with the store did not have a positive affect on behavioral attitudes as well as consumer evaluations towards SBs, but did confirm findings from previous research that CS affects WOM for the store (Jones and Sasser Jr 1995; Zeithaml, Berry et al. 1996; Ranaweera and Prabhu 2003).

At the start of this study it was indicated that consumers make two types of purchase decisions, one is what type of products to buy, and the other is where to buy them. The consumption experience of the retail brand - that is expressed through customer satisfaction with the store - is not being used to influence the attitude towards the retailer's SBs. Therefore, it cannot be used to

predict sales of SB products and the level of SB acceptance. The attributes contributing to CS, on the other hand, are important in keeping the retailer's store in the consideration set of consumers and ideally contribute to making it the preferred store where they make most of their purchases.

Another theoretical contribution of this study is the identification of the CS attributes with the greatest influence. CS with the store was measured by assessing how consumers perceive the quality of products and services offered by a specific retailer. Specifically, thirteen attributes were selected to measure the level of satisfaction with the store (Table 4.14). Using the service quality dimensions identified by Rust and Oliver (1994), the attributes were grouped into three categories: satisfaction with the environment of the store (e.g. cleanliness); satisfaction with the way the retailer was delivering the service (e.g. availability of employees, out of stocks); and satisfaction with the actual service product (e.g. size of the store, location). The results in Table 6.4, suggest that the attributes with the greatest influence on the overall CS construct are those related to the product offering, to a lesser extent the attributes related to how the product is delivered, and finally the attributes associated with the store environment. Consequently, improving the level of satisfaction with the service product and service delivery is likely to improve overall levels of CS with the store.

Table 6.3: Customer Satisfaction variables - Results for First-Order Construct

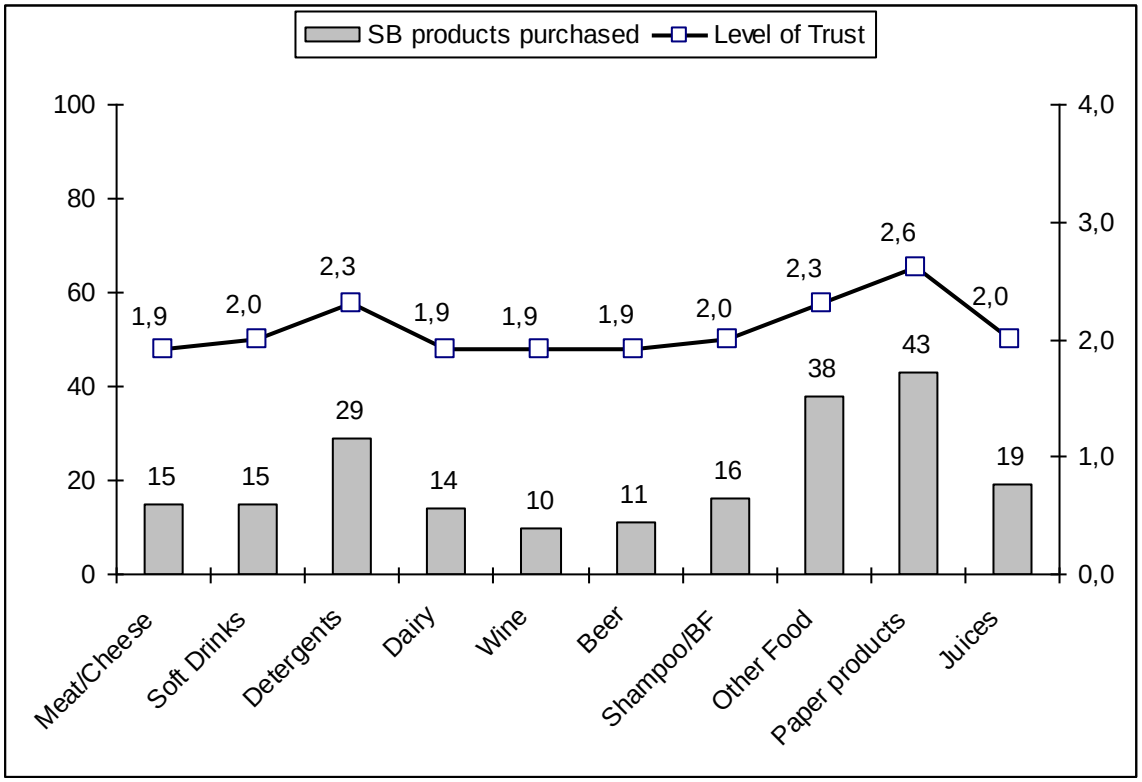
Path coefficients	Total (All nine RTs)	AB	Sklavenitis	Carrefour	Lidl
Environment	0,336	0,555	0,270	0,407	0,332
Delivery	0,454	0,481	0,912	0,135	-0,010
Product	0,479	0,185	0,021	0,691	0,801
Total (All nine RTs)	Mean	sd.	Valid	Missing	
Environment*	3,17	0,54	448	456	
Delivery*	3,38	0,47	734	170	
Product*	3,15	0,46	511	393	
Store Satisfaction*	3,25	0,39	226	678	

* 1= not at all, 2= not so satisfied, 3= satisfied, 4 = very satisfied

6.3 Discussion of Descriptive Findings

This study was conducted in Greece, which is an underdeveloped retail market for SBs. Store brand market share in Greece is well behind that of other European countries. This is reflected in the findings, since only 60% of the respondents indicated that they had purchased SBs, and of these purchasers approximately 30% had only purchased SB from a single product category, whilst 35% had bought SBs in more than four product categories. The findings also confirmed significant differences in SB adoption among the ten product categories and among the nine retailers included in the study.

Figure 6.1: Penetration of SB product categories and Level of Trust



Substantial differences were observed in the behavioral attitude towards the ten SB product categories investigated (Figure 6.1). Paper products and other food, characterized by the lowest levels of functional and social or psychological risk, exhibited the highest level of purchase (43% and 38% respectively). In contract, SB purchases in the wine and beer categories showed the lowest level of acceptance (10% and 11% respectively). These product categories are mostly consumed within a social context and therefore exhibit a higher level of psychological risk (Semeijn, Van Riel et al. 2004). The findings also indicate that there is a balance between the cognitive and the behavioral component of the attitude towards SB. The product categories with the highest purchase rate also exhibit the highest level of trust as illustrated in Figure 6.1.

Furthermore, the results (Table 6.4) confirmed previous research (Richardson, Jain et al. 1996a; Dhar and Hoch 1997) on the variations in SB adoption, penetration and level of trust in SBs among grocery retailers. The discount grocery retailer (Lidl) had the highest level of SB adoption and penetration (82% of its customers had purchased SBs), and on average consumers had purchased from 3.9 different SB product categories. Lidl respondents also exhibited the highest level of trust in SBs (2.47 versus 1.97 for the overall level of trust). The above results are to a large extent expected since a large portion of Lidl's merchandise strategy is based on SBs. As far as the other grocery retailers, were concerned the findings indicated that there were no significant differences in the level of adoption but that there were variations in penetration levels, and in the level of trust in SB amongst the retailers. Thus, consumers who purchased from Carrefour were more prone to accept SBs from a greater number of product categories than was the case of customers of Sklavenitis and AB.

Table 6.4: Store Brand adoption, SB Penetration, and Level of Trust in SBs

	Total (ALL nine RTs)	AB	Sklavenitis	Carrefour	Lidl
SB Adoption	60%	60%	61%	59%	82%
SB Penetration*	2,01	1,65	1,51	1,93	3,91
Level of Trust in SB**	1,97	1,84	1,91	1,92	2,47

* number of categories purchased

** 1= do not trust at all, 2= trust a little, 3= trust somehow, 4= trust a lot

Furthermore, the research measured the level of trust in SBs in three non–food and in six food product categories. Looking at the path coefficients in Table 6.5, we observe that the non-food SBs have the greater influence on the SB trust construct and consequently the highest explanatory power. The only exception is again Sklavenitis – which shows a reverse relationship i.e. food SBs have the greatest influence in the formation of the trust in SBs construct.

Looking at the level of trust in the nine different SB product categories, we can make a number of observations. At first, the average level of trust in SBs is low; respondents have indicated that they "trust SBs a little". Secondly, there are differences in the level of trust among the different SB product categories, which ranges from the highest for paper products to the lowest for wine and dairy (mean of 2,59 versus 1,89). Overall, consumers have indicated a higher level of trust towards non-food than food SBs. We have seen from our literature review that the construct of trust is an outcome of a process that evolves from past experience. Therefore, SB product categories with a low trial rate are more likely to have low level of trust. This can also be explained by the differences in the perceived risk in those categories. Lastly, there are some product categories with high missing values (e.g. 190 for wine versus 94 for paper products). This can be explained either by the low level of awareness in the particular category or a low trial rate.

Table 6.5: Trust in Store Brand variables - Results for First-Order Construct

Path coefficients	*Total* (All nine RTs)	AB	Sklavenitis	Carrefour	Lidl
Trust in SB	0,456	0,587	0,391	0,451	0,550
Trust in Food SB	0,370	0,539	0,973	0,354	0,167
Trust in Non-Food SB	0,687	0,577	0,043	0,701	0.903
Total (All nine RTs)*	Mean	sd.	Valid	Missing	
Trust in SB	1,97	0,86	628	276	
Trust in Non-Food SB	2,25	0,95	723	181	
Detergents	2,28	1,11	790	114	
Shampoo/BF	2,01	1,07	751	153	
Paper products	2,59	1,07	810	94	
Trust in Food SB	1,89	0,88	644	260	
Meat and Cheese	1,92	1,05	767	137	
Soft drinks	1,99	1,07	753	151	
Dairy	1,89	1,04	747	157	
Wine	1,89	1,06	712	192	
Other food	2,27	1,05	803	101	
Juices	2,01	1,08	764	140	

* 1= do not trust at all, 2= trust a little, 3= trust somehow, 4= trust a lot

The significance of WOM has been explained through the literature. Especially in services, because it is difficult for consumers to evaluate before purchase, WOM is used as an unbiased source of information (Murray 1991; Duan, Gu et al. 2008; Court, Elzinga et al. 2009; Bughin, Doogan et al. 2010). Our findings suggest that on average approximately 90% of the respondents indicated that they would either recommend or definitely recommend the store to others (Table 6.6). This very high positive WOM can be explained because respondents were selected on the basis of their commitment to the specific grocery retailer ("the place where they make most of their purchases"). The high

level of affective attitude towards the grocery retailer can be explained by the behavioral attitude. Therefore, a large percentage of the respondents are “active loyalists” since they have a strong tendency to recommend the retailer to others. Among the nine grocery retailers in our sample, Sklavenitis and Lidl exhibited the strongest positive WOM (approximately 97% and 96% of the respondents indicated that they would either recommend or definitely recommend the store to others).

Table 6.6: Word-of-Mouth

	Total (All nine RTs)	AB	Carrefour	Lidl	Sklavenitis
Count	882	98	96	98	97
Mean	3,39	3,52	3,47	3,69	3,59
Std. Deviation	0,750	0,721	0,781	0,601	0,640
Definitely not Recommend	2,8%	3,1%	4,2%	2,0%	2,1%
May be not Recommend	7,7%	4,1%	5,2%	2,0%	1,0%
Recommend	37,3%	30,6%	30,2%	30,6%	22,7%
Definitely Recommend	52,2%	62,2%	60,4%	65,3%	74,2%

1= Definitely not recommend, 2= May be not, 3= Recommend, 4= Definitely recommend

6.4 Managerial Implications of the Research

Retailers and manufacturers are the two main players in the channel of distribution. Historically, they cooperate in order to achieve their own objectives and to facilitate buyer-seller relationships. Traditionally, manufacturers produce the goods that consumers need and attempt to develop processes for offering innovative low cost products. Retailers, in this scenario, are the customers of the

manufacturer. They buy products from the manufacturer and sell them to the final consumer. This buyer-seller relationship has been disturbed when retailers entered into many different product categories with their private brands. Retailers became competitors as well as customers to manufacturers and in addition by virtue of ownership of more and more shelf space (and access to consumers) they have gained power over many manufacturers displacing these products with private brands (Sinha and Batra 1999). Consequently, a separate discussion of the managerial implications for each agent is necessary.

6.4.1 Implications for the Retailer

SBs allow retailers to increase store traffic, store differentiation and loyalty (Nandan and Dickinson 1994; Steenkamp and Dekimpe 1997; Corstjens and Lal 2000; Ailawadi and Keller 2004), create and support an image for their store (Quelch and Harding 1996), build power vis-à-vis the manufacturers (Hoch 1996; Steenkamp and Dekimpe 1997; Ailawadi 2001), increase their margins and their profitability (Simmons and Meredith 1984; Corstjens, Corstjens et al. 1995; Dunne and Narasimhan 1999; Ailawadi and Harlam 2004). Therefore, the strategic importance of SBs to retailers is not in doubt.

Retailers must understand that there are different segments of shoppers and they should try to target them by implementing differentiated strategic approaches. Specifically, one segment is the non-SB shoppers while another is their SB shoppers that can be further segmented into the light, medium and heavy buyers (Table 5.10). Each of these segments represents a different form

of shopper behavior with a different level of involvement with the purchase and different criteria for evaluating products. Therefore, in order to achieve sustainable growth, they must approach each of these segments with a different strategy and tactics. For instance, they should try to increase the heavy SB buyers by motivating their existing SB shoppers to purchase from a wider range of product categories, and to keep shoppers that do not want to buy SB.

The findings of this study suggest that trust building strategies are a more effective way of influencing the behavioral attitude towards SB and therefore improving SB purchases. However, the challenge for the retailer is to overcome consumers' perceptions towards SB as being homogeneous across retailers (Richardson 1997; Ailawadi, Neslin et al. 2001). Retailers should try to break this perception and they must try to differentiate their SB from those of other retailers. Since the level of trust in SBs is the single most important predictor of SB sales, their strategies should be targeted towards increasing the level of trust for their own SBs. They should try to create positive attitudes and perceptions towards their SBs to help customers feel secure that the brand will meet their expectations. In addition, they should promote their ability to offer quality SBs, offer a wide assortment of SBs, ensure availability of SBs, clearly display prices, and through merchandising facilitate cost-benefit comparisons. It is the researcher's opinion that retailers can maximize the benefits of their brand equity if they decide to use their own name as part of the SB brand name or to clearly identify themselves on the packaging. Thus, a family brand policy is

recommended since the use of “phantom” brand names for SBs does not help them to fully leverage their brand name.

Furthermore, variations in the rate of adoption by product category and by retailer, as well as variations in the level of trust in SBs suggest that the development and implementation of SB strategies should be retailer and market-specific. This way retailers will be able to take into consideration differences in the level of involvement with the product category (Miquel, Caplliure et al. 2002), allow for differences in store image, markets, shoppers, and retail organizations. Based on buying patterns, they need to identify differences among their different stores and adopt their tactics (product mix between SB and manufacturer brands, SKU rationalization, merchandising, in-store promotions) accordingly.

The findings also suggest that store satisfaction can affect WOM and thus store loyalty but not behavior towards SB. Improving satisfaction with the store will not directly lead to an increase in the store’s SB sales. However, retailers should remember that their overall objective is to increase sales and profitability and that maintaining a strong level of satisfaction for their stores is one strategy towards that objective. Our findings suggest that the width and the depth of products offered by a grocery store to its customers are important determinants of customer satisfaction. Consequently, shoppers when making their purchases want to be faced with many product alternatives from which they can select. Obviously if a retailer cuts down on SKU’s from other brands in order to make space for its SBs, he will not be offering as much depth and/or width to its consumers.

6.4.2 Implications for the Manufacturer

Store brands are gaining increasing importance in many European countries and in many product categories. The increase in the adoption and penetration of SB along with mature markets and the recent recession has created many challenges for manufacturers. Especially in the categories that demonstrate strong SB presence there is major threat to the manufacturer brands.

The findings of our study suggest that trust towards the SBs is an important predictor of SB sales. So, manufacturers, in order to protect their market share should try to maintain or increase the consumers' level of trust towards their brands or to decrease the level of trust in SBs. Their trust building strategies should be focused on continuously trying to improve their products, on adding value to their brands and adopting their promotional messages. By using promotion effectively they should try to enhance the perceived value for their brands so that consumers will be willing to pay higher prices. According to Batra and Sinha (2000), the experience characteristics of a category positively affect sales of manufacturers' brands rather than the search characteristics. Therefore, they should motivate consumers to form their own perceptions through trial rather than encouraging them to read the information provided on the packaging. In addition, they should also try to decrease the level of trust in SB. This can be achieved by increasing the uncertainty towards SBs and thus making it more difficult for consumers to purchase the lower priced SBs. Finally, the researcher believes that manufacturers should be very careful when they attempt to

leverage their brand names. Extending their brands to many different product categories might lower the credibility of the brand (Milewicz and Herbig 1994) and thus inhibit consumers' trust towards the brand.

Consistent with earlier studies, the findings demonstrate that the strength of SBs is not consistent amongst different retailers. This study also found that there are variations in the level of trust in SBs among different retailers. Therefore, manufacturers need to develop their strategies on a per customer basis. They need to assess the environment with each of their key retail customers and try to identify the threats and opportunities with respect to SBs for their brands.

6.5 Limitations of the Study and Recommendations for Future Research

Whilst the findings of this study expand upon the role and importance of customer satisfaction with the store, trust in the SBs, and WOM (intention to recommend the store) to SB purchases, there are some limitations to consider when interpreting the results. These limitations themselves raise some interesting issues that need further research.

Firstly, since the current study has adopted the positivist approach, there are some limitations inherent to the research methods used with this philosophical approach. Since the cross-sectional survey method was chosen rather than the experimental, no definite evidence of causal relationships can be drawn. Thus, in considering the findings, one should recognize the descriptive

and explanatory nature of this study in that it attempts to test theory, explain how variables are related, identify the directionality of these relationships, and make predictions (Churchill and Iacobucci 2002). Additionally, since there is evidence that store image dimensions change over time future research might use a longitudinal approach (Hansen and Deutscher 1977; Davies 1992b; Mitchell and Kiral 1998).

The findings might lack generalizability to different national contexts or to different of retail sectors. This study collected data with respect to ten different SB product categories and was conducted across nine different grocery retailers thus increasing the external validity of the findings. But the data were collected in a specific setting, the Greek market. Even though the Greek market is a growing market for SBs, Greek grocery retailers' have not developed strong brand equities. The literature from which the model was generated and around which the hypotheses were derived was, on the whole, set within more "mature" retail markets from a SB perspective. This applicability of ideas and frameworks generated in this type of context to other contexts needs further research. Will the same results apply in markets where the retailer's brand equity is different? Or are the results limited to the Greek market environment and similar retail contexts?

The other aspect that places constraints in the generalizability of the results is that the data of this study originate only from the grocery store industry and thus might have produced some bias in the results. For example our results suggest that the level of trust in SBs has a positive influence in SB purchases,

but is this so due to the importance of trust in this sector? It might be that the trust outcome is more suitable since there are concerns about food safety and nutritional value and consumers might be more vulnerable to manufacturer's and retailer's practices. So, we can generalize our findings but acknowledge that the generalizability of the results may be limited to the Greek market or to the grocery store industry. Therefore, these limitations provide an opportunity for future research that could explore the same themes in other countries or other retail sectors.

Another limitation is related with the way that trust was measured. For example, trust in SBs was measured by employing a single item. A sensitivity analyses was conducted to see whether there were differences in the structural relationships of the model at different levels of trust and no difference was indicated. The use of single item measures is widely used in the marketing literature (Drolet and Morrison 2001; Varki and Colgate 2001). However, it is recognized that using a single item for measuring a complex construct such as trust probably constitutes a limitation. Whilst score for the "overall level" of trust was obtained, there was no indication as to the reason behind their response. Respondents were asked to indicate their overall trust perceptions, for the nine SB product categories selected, without using any attribute specification. Therefore, future research might measure trust employing other established scales (Sirdeshmukh, Singh et al. 2002; Gurviez and Korchia 2003; Guenzi, Johnson et al. 2009). Furthermore, we have measured the level of trust in SBs but we have not considered the level of trust in the specific retailer and how this

impacts the trust in the retailer's SBs. Therefore, further research on this is needed.

The study measures WOM for the retailer store but it does not measure WOM for the SBs of the store. SBs are perceived as a higher risk purchase than manufacturer brands (Mieres, Martin et al. 2006) and consumers in order to reduce perceived risk they need to rely more on WOM (Murray 1991). Therefore, we need to find out to what extend SB buyers are willing to share their experience with others and when they share it the direction on their WOM; whether is positive or negative.

Another limitation of this study is inherent in telephone survey research. Telephone surveys use an interviewer-administered questionnaire and data are self-reported, thus subject to recall bias. However, evidence suggests that telephone surveys yield more complete and accurate data than do in-person interviews (Holbrook, Green et al. 2003). But we still have the sample bias due to non-coverage of people without telephone and to non-response (Struebbe, Kernan et al. 1986; Groves 1990).

Finally, the PLS modeling approach is very popular because of its ability to model latent constructs under conditions of non-normality and small to medium sample sizes but its major limitation is that it is focusing on prediction of the constructs rather than explanation of the relationships between the indicators (Marcoulides, Chin et al. 2009). So, when interpreting the results, we should keep in mind that the purpose of PLS is the prediction of the latent variables. PLS is estimated with regression-based methods but simultaneously models the

relationships among latent variables (structural or inner models) and the relationships between a latent variable and its indicators (measurement or outer models) (Chin 1998a). Furthermore, “both reflective and formatively measured constructs are susceptible to structural misspecification and interpretational confounding” (Cenfetelli and Bassellier 2009). In our model, formative indicators were used which makes it more difficult to identify whether the source of instability is due to misspecification or interpersonal confounding (Diamantopoulos and Winklhofer 2001; Diamantopoulos, Riefler et al. 2008; Cenfetelli and Bassellier 2009).

REFERENCES

Aaker, D. (2003). "The Power of the Branded Differentiator." MIT Sloan Management Review **45**(1): 83-87.

Aaker, D. A. (1989). "Managing Assets and Skills: The Key To a Sustainable Competitive Advantage." California Management Review **31**(2): 91-106.

Aaker, D. A. (1992). "The Value of Brand Equity." Journal of Business Strategy **13**: 27.

Aaker, D. A. (1996). Building Strong Brands, New York: Free Press.

Agres, S. J. and T. M. Dubitsky (1996). "Changing Needs for Brands." Journal of Advertising Research **36**: 21-30.

Ailawadi, K. L. (2001). "The retail power-performance conundrum: What have we learned?" Journal of Retailing **77**: 299.

Ailawadi, K. L., N. Borin, et al. (1995). "Market power and performance: A cross-industry analysis of manufacturers and retailers." Journal of Retailing **71**(3): 211-248.

Ailawadi, K. L. and B. Harlam (2004). "An Empirical Analysis of the Determinants of Retail Margins: The Role of Store-Brand Share." Journal of Marketing **68**: 147-165.

Ailawadi, K. L. and K. L. Keller (2004). "Understanding retail branding: conceptual insights and research priorities." Journal of Retailing **80**: 331-342.

Ailawadi, K. L., S. A. Neslin, et al. (2001). "Pursuing the Value-Conscious Consumer: Store Brands Versus National Brand Promotions." Journal of Marketing **65**: 71-89.

Ainslie, A. and P. E. Rossi (1998). "Similarities in Choice Behavior Across Product Categories." Marketing Science **17**: 91.

Alan, D., A. Dick, et al. (1995). "Correlates of store brand proneness: some empirical observations." Journal of Product & Brand Management **4**: 15.

Ambler, T. (1997). "How much of brand equity is explained by trust?" Management Decision **35**(3/4): 283.

Anderson, E. W., C. Fornell, et al. (1994). "Customer Satisfaction, Market Share, and Profitability: Findings From Sweden." Journal of Marketing **58**: 53.

Anderson, E. W., C. Fornell, et al. (1997). "Customer satisfaction, productivity, and profitability: Differences between goods and services." Marketing Science **16**: 129.

Anderson, E. W. and M. W. Sullivan (1993). "THE ANTECEDENTS AND CONSEQUENCES OF CUSTOMER SATISFACTION FOR FIRMS." Marketing Science **12**: 125-143.

Anderson, R. E. (1973). "Consumer Dissatisfaction: The Effect of Disconfirmed Expectancy on Perceived Product Performance." Journal of Marketing Research (JMR) **10**: 38-44.

Armstrong, J. S. (1975). "Monetary Incentives in Mail Surveys." The Public Opinion Quarterly **39**(1): 111-116.

Arnold, D. (2000). "Seven Rules of International Distribution." Harvard Business Review **78**: 131-137.

Arnould, E., L. Price, et al. (2004). Consumers, McGraw-Hill/Irwin.

Assael, H. and J. Keon (1982). "Nonsampling vs. Sampling Errors in Survey Research." Journal of Marketing **46**: 114-123.

Auh, S. and M. D. Johnson (2005). "Compatibility effects in evaluations of satisfaction and loyalty." Journal of Economic Psychology **26**: 35-57.

Babbie, E. (2001). The Practice of Social Research. 9th ed., Belmont, CA, Wadsworth.

Babin, B. J. and M. Griffin (1998). "The Nature of Satisfaction: An Updated Examination and Analysis." Journal of Business Research **41**(2): 127-136.

Baker, M. J. (2001). "Selecting a Research Methodology." Marketing Review **1**: 373.

Baltas, G. (1997). "Determinants of store brand choice: a behavioral analysis." Journal of Product & Brand Management **6**(5): 315.

Baltas, G. and P. C. Argouslidis (2007). "Consumer characteristics and demand for store brands." International Journal of Retail & Distribution Management **35**: 328-341.

Barroso, C., G. Cepeda, et al. (2010). Applying Maximum Likelihood and PLS on Different Sample Sizes: Studies on SERVQUAL Model and Employee Behavior. Handbook of Partial Least Squares. V. E. Vinzi, W. W. Chin, J. Henseler and H. Wang, Springer, Berlin.

Batra, R. and I. Sinha (2000). "Consumer-Level Factors Moderating The Success Of Private Label Brands." Journal of Retailing **76**: 175.

Bayus, B. L. (1985). "Word of Mouth: The Indirect Effects of Marketing Efforts." Journal of Advertising Research **25**(3): 31.

Bell, R., R. Davies, et al. (1997). "The Changing Structure of Food Retailing in Europe: the Implications for Strategy." Long Range Planning **30**: 853-861.

Bellizzi, J. A., H. F. Krueckeberg, et al. (1981). "Consumer Perceptions of National, Private, and Generic Brands." Journal of Retailing **57**: 56.

Bennet, P. D. (1995). Dictionary of Marketing Terms. Chicago, American Marketing Association.

Bird, M., C. Channon, et al. (1970). "Brand Image and Brand Usage." Journal of Marketing Research (JMR) **7**: 307-314.

Bitner, M. J. (1990). "Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses." Journal of Marketing **54**: 69-82.

Blaikie, N. (2000). Designing Social Research. Cambridge, Polity Press.

Bloemer, J. and K. de Ruyter (1998). "On the relationship between store image, store satisfaction and store loyalty." European Journal of Marketing **32**(5/6): 397-513.

Bloemer, J. M. M. and H. D. P. Kasper (1995). "The complex relationship between consumer satisfaction and brand loyalty." Journal of Economic Psychology **16**(2): 311.

Bloemer, J. M. M. and T. B. C. Poiesz (1989). "The Illusion of Consumer Satisfaction." Journal of Satisfaction, Dissatisfaction and Complaining Behavior **2**: 43-48.

Bollen, K. and R. Lennox (1991). "Conventional wisdom on measurement: A structural equation perspective." Psychological Bulletin **110**(2): 305-314.

Bolton, R. N. (1998). "A Dynamic Model of the Duration of the Customer's Relationship With a Continuous Service Provider: The Role of Satisfaction." Marketing Science **17**: 45.

Bolton, R. N. and J. H. Drew (1991). "A Multistage Model of Customers' Assessments of Service Quality and Value." Journal of Consumer Research **17**: 375-384.

Bolton, R. N., R. K. Kannan, et al. (2000). "Implications of Loyalty Program Membership and Service Experiences for Customer Retention and Value." Journal of the Academy of Marketing Science **28**: 95.

Bone, P. F. (1992). "Determinants of Word-Of-Mouth Communications During Product Consumption." Advances in Consumer Research **Vol.19**: pp.579-583.

Boulding, W., A. Kalra, et al. (1993). "A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions." Journal of Marketing Research (JMR) **30**: 7-27.

Boyd, J. H. W., R. Westfall, et al. (1981). Marketing research Text and cases, 5th ed., Irwin, Illinois.

Brace, I. (2008). Questionnaire design: how to plan, structure and write survey material for effective market research, London; Philadelphia: Kogan Page, 2nd ed.

Brand, R. R. and J. J. Cronin (1997). "Consumer-specific determinants of the size of retail choice sets: An empirical comparison of." Journal of Services Marketing **11**(1): 19.

Brennan, M., S. Benson, et al. (2005). "The effect of introductions on telephone survey participation rates." International Journal of Market Research **47**: 65-74.

Brown, J. R. and R. P. Dant (2008). "Scientific method and retailing research: A retrospective." Journal of Retailing **84**(1): 1-13.

Brown, T. J. and P. A. Dacin (1997). "The Company and the Product: Corporate Associations and Consumer Product Responses." Journal of Marketing **61**: 68-84.

Bryant, B. E. and J. Cha (1996). "Crossing the threshold." Marketing Research **8**(4): 20-28.

Bughin, J., J. Doogan, et al. (2010). "A new way to measure word-of-mouth marketing." McKinsey Quarterly **2**: 113-116.

Bullmore, J. (1984). The Brand and its image Re-visited. International Journal of Advertising**:** 235-238.

Burck, C. G. (1979). Plain Labels Challenge the Supermarket Establishement. Fortune, Vol.99**:** 70-76.

Burns, R. B. (2000). Introduction to Research methods. 4th ed., London, Sage Publications.

Burt, S. (2000). "The strategic role of retail brands in British grocery retailing." European Journal of Marketing **34**: 875.

Burt, S. and A. Mavrommatis (2006). "The international transfer of store brand image." International Review of Retail, Distribution & Consumer Research **16**: 395-413.

Burt, S. L. and L. Sparks (2002). "Branding Experiences: Corporate Branding in Retail." Corporate Reputation Review **5**(2/3): 193.

Bush, A. J. and J. F. Hair Jr (1985). "An Assessment of the Mall Intercept as a Data Collection Method." Journal of Marketing Research (JMR) **22**: 158-167.

Bush, A. J. and A. Parasuraman (1985). "Mall Intercept versus Telephone-Interviewing Environment." Journal of Advertising Research **25**(2): 36.

Cenfetelli, R. T. and G. v. Bassellier (2009). "INTERPRETATION OF FORMATIVE MEASUREMENT IN INFORMATION SYSTEMS RESEARCH." MIS Quarterly **33**: 689-707.

Chan Choi, S. and A. T. Coughlan (2006). "Private label positioning: Quality versus feature differentiation from the national brand." Journal of Retailing **82**(2): 79-93.

Chandrashekaran, M., K. Rotte, et al. (2007). "Satisfaction Strength and Customer Loyalty." Journal of Marketing Research (JMR) **44**: 153-163.

Chaudhuri, A. and M. B. Holbrook (2001). "The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty." Journal of Marketing **65**: 81-93.

Chin, W. W. (1998a). The Partial Least Squares Approach to Structural Equation Modeling Modern Methods for Business Research. G. A. Marcoulides, Lawrence Erlbaum Associates, New Jersey.

Chin, W. W. (1998b). "Issues and Opinion on Structural Equation Modeling." MIS Quarterly: 1-1.

Chin, W. W. (2010a). How to Write and Report PLS Analyses. Handbook of Partial Least Squares. V. E. Vinzi, W. W. Chin, J. Henseler and H. Wang, Springer, Berlin**:** 655.

Chin, W. W. (2010b). Bootstrap Cross-Validation Indices for PLS Path Model Assessment. Handbook of Partial Least Squares. V. E. Vinzi, W. W. Chin, J. Henseler and H. Wang, Springer, Berlin**:** 83.

Chin, W. W., B. L. Marcolin, et al. (1996). A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results from a Monte

Carlo Simulation Study and Voice mail Emotion/Adoption Study. International Conference of Information Systems, Cleveland, Ohio.

Chiquan, G., A. Kumar, et al. (2004). "Customer satisfaction and profitability: is there a lagged effect?" Journal of Strategic Marketing **12**: 129-144.

Churchill, G. A. J. and D. Iacobucci (2002). Marketing Research: Methodological Foundations, 8th ed., Thomson Learning.

Churchill Jr, G. A. (1979). "A Paradigm for Developing Better Measures of Marketing Constructs." Journal of Marketing Research (JMR) **16**: 64-73.

Churchill Jr, G. A. and C. Surprenant (1982). "An Investigation Into the Determinants of Customer Satisfaction." Journal of Marketing Research (JMR) **19**: 491-504.

Clarke, I. and J. Rowley (1995). "A case for spatial decision-support systems in retail location planning." International Journal of Retail & Distribution Management **23**(3): 4.

Clason, D. L. and T. J. Dormody (2000). "Analyzing Data Measures by Individual Likert-Type Items." Journal of Agricultural Education **35**(4): 31-35.

Collins-Dodd, C. and T. Lindley (2003). "Store brands and retail differentiation: the influence of store image and store brand attitude on store own brand perceptions." Journal of Retailing and Consumer Services **10**(6): 345-352.

Coltman, T., T. M. Devinney, et al. (2008). "Formative versus reflective measurement models: Two applications of formative measurement." Journal of Business Research **61**(12): 1250-1262.

Corstjens, J. and M. Corstjens (1995). Store Wars: The Battle for Mindspace and Shelfspace, Wiley.

Corstjens, J., M. Corstjens, et al. (1995). "Retail competition in the fast-moving consumer goods industry: The case of France and the UK." European Management Journal **13**(4): 363-373.

Corstjens, M. and R. Lal (2000). "Building Store Loyalty Through Store Brands." Journal of Marketing Research (JMR) **37**(3): 281-291.

Cotterill, R. W., W. P. Putsis Jr, et al. (2000). "Assessing the Competitive Interaction between Private Labels and National Brands." Journal of Business **73**(1): 109.

Court, D., D. Elzinga, et al. (2009). "The consumer decision journey." McKinsey Quarterly(3): 96-107.

Creswell, J. W. (2003). Research Design: Qualitative, quantitative, and mixed method, Sage Publications, Inc.

Cronin Jr, J. J., M. K. Brady, et al. (2000). "Assessing the Effects of Quality, Value, and Customer Satisfaction on Consumer Behavioral Intentions in Service Environments." Journal of Retailing **76**: 193.

Cronin Jr, J. J. and S. A. Taylor (1992). "Measuring service quality: A reexamination and extension." Journal of Marketing **56**: 55.

Cunningham, I. C. M., A. P. Hardy, et al. (1982). "Generic Brands versus National Brands and Store Brands." Journal of Advertising Research **22**(5): 25-32.

Cunningham, R. M. (1956). "BRAND LOYALTY--what, where, how much?" Harvard Business Review **34**(1): 116-128.

Dabholkar, P. A., C. D. Shepherd, et al. (2000). "A Comprehensive Framework for Service Quality: An Investigation of Critical Conceptual and Measurement Issues Through a Longitudinal Study." Journal of Retailing **76**: 139.

Danaher, P. J. and V. Haddrell (1996). "A comparison of question scales used for measuring customer satisfaction." International Journal of Service Industry Management **7**(4): 4-26.

Davies, G. (1990). "Marketing to retailers: A battle for distribution?" Long Range Planning **23**(6): 101-108.

Davies, G. (1992a). "The Two Ways in Which Retailers Can be Brands." International Journal of Retail & Distribution Management **20**(2): 23-34.

Davies, G. (1992b). Positioning, image and the marketing of multiple retailers. International Review of Retail, Distribution & Consumer Research, Routledge. **2:** 13.

Davies, G. (1998). "Retail brands and the theft of identity." International Journal of Retail & Distribution Management **26**(4): 140.

Dawar, N. (2004). "What Are Brands Good For?" MIT Sloan Management Review **46**(1): 31-37.

Day, G. S. (1969). "A Two-Dimensional Concept Of Brand Loyalty." Journal of Advertising Research **9**(3): 29-35.

de Chernatony, L. (1989a). "Marketers' and Consumers' Concurring Perceptions of Market Structure." European Journal of Marketing **23**: 7-16.

de Chernatony, L. (1989b). "Branding in an Era of Retailer Dominance." International Journal of Advertising **8**: 245-260.

de Chernatony, L. (1993). "Categorizing Brands: Evolutionary Processes Underpinned by Two Key Dimensions." Journal of Marketing Management **9**: 173-188.

de Chernatony, L. (1997). "Integrated brand building using brand taxonomies." Journal of Product & Brand Management **6**: 56.

de Chernatony, L. and G. McWilliam (1989). "The Varying Nature of Brands as Assets." International Journal of Advertising **8**: 339-349.

De Wuif, K., G. Odekerken-Schroder, et al. (2005). "Consumer perceptions of store brands versus national brands." Journal of Consumer Marketing **22**: 223-232.

Delgado-Ballester, E. and J. L. Munuera-Aleman (2001). "Brand trust in the context of consumer loyalty." European Journal of Marketing **35**: 1238-1258.

Dellarocas, C. (2003). "The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms." Management Science **49**: 1407-1424.

Deloitte (2010) "Emerging from the downturn - Global Powers of Retailing 2010."

Dhar, S. K. and S. J. Hoch (1997). "Why store brand penetration varies by retailer." Marketing Science **16**: 208.

Diamantopoulos, A. (2008). "Formative indicators: Introduction to the special issue." Journal of Business Research **61**(12): 1201-1202.

Diamantopoulos, A., A.C. Tynan and R. Hughes (1988). "Determinants of Customer Satisfaction Among Luxury Car Buyers: An Empirical Analysis." Irish Marketing Review **3**(March): 149-162.

Diamantopoulos, A., P. Riefler, et al. (2008). "Advancing formative measurement models." Journal of Business Research **61**(12): 1203-1218.

Diamantopoulos, A. and B. Schlegelmilch (1997). Taking the Fear out of Data Analysis, London: The Dryden Press.

Diamantopoulos, A. and J. A. Singuaw (2006). "Formative Verus Reflective Indicators in Organizational Measure Development: A Comparison and Empirical Illustration." British Journal of Management **17**(4): 263-282.

Diamantopoulos, A. and H. M. Winklhofer (2001). "Index Construction with Formative Indicators: An Alternative to Scale Development." Journal of Marketing Research (JMR) **38**: 269-277.

Dick, A., A. Jain, et al. (1996). "How consumers evaluate store brands." Journal of Product & Brand Management **5**(2).

Dick, A. S. and K. Basu (1994). "Customer Loyalty: Toward an Integrated Conceptual Framework." Journal of the Academy of Marketing Science **22**: 99-113.

Doney, P. M. and J. P. Cannon (1997). "An examination of the nature of trust in buyer-seller relationships." Journal of Marketing **61**: 35.

Doyle, P. (1989). "Building Successful Brands: The Strategic Options." Journal of Marketing Management **5**: 77-95.

Drolet, A. L. and D. G. Morrison (2001). "Do We Really Need Multiple-Item Measures in Service Research?" Journal of Service Research **3**(3): 196-204.

Duan, W., B. Gu, et al. (2008). "The dynamics of online word-of-mouth and product sales--An empirical investigation of the movie industry." Journal of Retailing **84**(2): 233-242.

Duarte, P. A. O. and M. L. B. Raposo (2010). A PLS Model to Study Brand Preference: An Application to the Mobile Phone Market. Handbook of Partial Least Squares. V. E. Vinzi, W. W. Chin, J. Henseler and H. Wang, Springer, Berlin.

Dunn, M. G., P. E. Murphy, et al. (1986). "Research Note: The Influence of Perceived Risk on Brand Preference for Supermarket Products." Journal of Retailing **62**: 204-216.

Dunne, D. and C. Narasimhan (1999). "The New Appeal of Private Labels." Harvard Business Review **77**(3): 41-52.

Dwyer, F. R., P. H. Schurr, et al. (1987). "Developing Buyer-Seller Relationships." Journal of Marketing **51**: 11-27.

East, R., K. Hammond, et al. (2008). "Measuring the impact of positive and negative word of mouth on brand purchase probability." International Journal of Research in Marketing **25**(3): 215-224.

East, R., K. Hammond, et al. (2007). "The relative incidence of positive and negative word of mouth: A multi-category study." International Journal of Research in Marketing **24**(2): 175-184.

East, R. and M. D. Uncles (2008). "In praise of retrospective surveys." Journal of Marketing Management **24**: 929-944.

Erdem, T., Z. Ying, et al. (2004). "Performance of Store Brands: A Cross-Country Analysis of Consumer Store-Brand Preferences, Perceptions, and Risk." Journal of Marketing Research (JMR) **41**(1): 86-100.

Field, A. (2009). Discovering Statistics Using SPSS. London, SAGE Publications Ltd.

Fischer, F. (1998). "Beyond empiricism: policy inquiry in postpositivist perspective." Policy Studies Journal **26**(1): p129-146.

Fischer, F. (1998). "Beyond Empiricism: Policy Inquiry in Postpositivist Perspective." Policy Studies Journal **26**(1): 129-146.

Fitzell, P. B. (2003). Private Label marketing in the 21st century: store brands/exclusive brands on the cutting edge, New York : Global Books LLC, c2003.

Fornell, C. (1992). "A National Customer Satisfaction Barometer: The Swedish Experience." Journal of Marketing **56**: 6-21.

Fornell, C. and F. L. Bookstein (1982). "Two Structural Equation Models: LISREL and PLS Applied to Consumer Exit-Voice Theory." Journal of Marketing Research (JMR) **19**: 440-452.

Fornell, C., M. D. Johnson, et al. (1996). "The American Customer Satisfaction Index: Nature, Purpose, and Findings." Journal of Marketing **60**: 7-18.

Fowler, F. J. J. (2009). Survey Research Methods, Sage Publications, Inc.

Frank, R. E. and J. H. W. Boyd (1965). "Are Private-Brand-Prone Grocery Customers Really Different?" Journal of Advertising Research **5**(4): 27-35.

Franke, G. R., K. J. Preacher, et al. (2008). "Proportional structural effects of formative indicators." Journal of Business Research **61**(12): 1229-1237.

Friedmann, R. and V. P. Lessig (1987). Psychological Meaning of Products and Product Positioning. Journal of Product Innovation Management. **4:** 265-273.

Gale, B. (1997). "Satisfaction is Not Enough." Marketing News **October 27, p.18**.

Garbarino, E. and M. S. Johnson (1999). "The Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships." Journal of Marketing **63**: 70-87.

Giese, J. L. and J. A. Cote (2000). "Defining Consumer Satisfaction." Academy of Marketing Science **1**.

Goldman, A., S. Ramaswami, et al. (2002). "Barriers to the advancement of modern food retail formats: theory and measurement." Journal of Retailing **78**: 281.

Gomez, M. I., E. W. McLaughlin, et al. (2004). "Customer satisfaction and retail sales performance: an empirical investigation." Journal of Retailing **80**(4): 265-278.

Gotlieb, J. B., D. Grewal, et al. (1994). "Consumer Satisfaction and Perceived Quality: Complementary or Divergent Constructs?" Journal of Applied Psychology **79**: 875-885.

Granzin, K. L. (1981). "An Investigation of the Market for Generic Products." Journal of Retailing **57**: 39.

Green, D. H., D. W. Barclay, et al. (1995). "Entry strategy and long-term performance: Conceptualization and empirical examination." Journal of Marketing **59**: 1.

Grewal, D., R. Krishnan, et al. (1998). "The Effects of Store Name, Brand Name and Price Discounts on Consumers' Evaluations and Purchase Intentions." Journal of Retailing **74**: 331-352.

Grewal, D., M. Levy, et al. (2004). "Retail Branding and Customer Loyalty: an overview." Journal of Retailing **80**(4): ix-xii.

Gronroos, C. (1984). "A Service Quality Model and its Marketing Implications." European Journal of Marketing **18**(4): 36.

Grover, R. and M. Vriens (2006). The Handbook of Marketing Research: uses, misuses, and future advances. California, Sage Publications.

Groves, R. M. (1990). "THEORIES AND METHODS OF TELEPHONE SURVEYS." Annual Review of Sociology **16**: 221-240.

Groves, R. M., N. A. Mathiowetz, et al. (1984). "Computer Assisted Telephone Interviewing: Effects on Interviewers and Respondents." Public Opinion Quarterly **48**: 356-369.

Guba, E. G. (1990). The paradigm dialog. Newbury Park, CA, Sage.

Guenzi, P., M. D. Johnson, et al. (2009). "A comprehensive model of customer trust in two retail stores." Journal of Service Management **20**: 290-316.

Gurviez, P. and M. Korchia (2003). "Proposal for a Multidimensional Brand Trust Scale". 32nd EMAC Conference Glasgow.

Gustafsson, A., M. D. Johnson, et al. (2005). "The Effects of Customer Satisfaction, Relationship Commitment Dimensions, and Triggers on Customer Retention." Journal of Marketing **69**: 210-218.

Hair, J. F. J., W. C. Black, et al. (2010). Multivariate Data Analysis Pearson.

Hallowell, R. (1996). "The relationships of customer satisfaction, customer loyalty, and profitability: an empirical study." International Journal of Service Industry Management **7**(4).

Halstead, D. and C. B. Ward (1995). "Assessing the vulnerability of private label brands." Journal of Product & Brand Management **4**: 38.

Hansen, R. A. and T. Deutscher (1977). "An Empirical Investigation of Attribute Importance in Retail Store Selection." Journal of Retailing **53**: 59.

Harris, B. F. and R. A. Strang (1985). "Marketing Strategies in the Age of Generics." Journal of Marketing **49**: 70-81.

Hauser, P. M. and M. H. Hansen (1944). "ON SAMPLING IN MARKET SURVEYS." Journal of Marketing **9**(1): 26-31.

Hawkins, D. I., R. J. Best, et al. (2004). Consumer Behavior, Boston, MA: McGraw-Hill Irwin.

Helgesen, O. (2006). "Are Loyal Customers Profitable? Customer Satisfaction, Customer (Action) Loyalty and Customer Profitability at the Individual Level." Journal of Marketing Management **22**: 245-266.

Henseler, J., C. M. Ringle, et al. "The use of partial least squares path modeling in international marketing." Advances in International Marketing **20**: 277-319.

Henseler, J., C. M. Ringle, et al. (2009). The use of partial least squares path modeling in international marketing. New Challenges to International Marketing (Advances in International Marketing, Volume 20). P. N. G. e. in Rudolf R. Sinkovics, Emerald Group Publishing Limited, pp.277-319.

Herr, P. M., F. R. Kardes, et al. (1991). "Effects of Word-of-Mouth and Product-Attribute Information of Persuasion: An Accessibility-Diagnosticity Perspective." Journal of Consumer Research **17**: 454-462.

Herzog, H. (1963). Behavioral Science Concepts for Analyzing the Consumer. Marketing and the Behavioral Sciences, Perry Bliss, ed. Boston: Allyn and Bacon Inc., 76-86.

Hoch, S. J. (1996). "How Should National Brands Think about Private Labels?" Sloan Management Review **37**: 89-102.

Hoch, S. J. and S. Banerji (1993). "When Do Private Labels Succeed?" Sloan Management Review **34**: 57-67.

Holbrook, A. L., M. C. Green, et al. (2003). "TELEPHONE VERSUS FACE-TO-FACE INTERVIEWING OF NATIONAL PROBABILITY SAMPLES WITH LONG QUESTIONNAIRES." Public Opinion Quarterly **67**: 79-125.

Homburg, C., W. D. Hoyer, et al. (2002). "Service Orientation of a Retailer's Business Strategy: Dimensions, Antecedents, and Performance Outcomes." Journal of Marketing **66**: 86-101.

Howard, J. A. and J. N. Sheth (1969). The Theory of Buyer Behavior, New York: John Wiley and Sons.

Hulland, J. (1999). "Use of partial least squares (PLS) in strategic management research: A review of four recent." Strategic Management Journal **20**: 195.

Jacoby, J. and D. B. Kyner (1973). "Brand Loyalty Vs. Repeat Purchasing Behavior." Journal of Marketing Research (JMR) **10**: 1-9.

Jacoby, J., D. E. Speller, et al. (1974). "Brand Choice Behavior as a Function of Information Load." Journal of Marketing Research (JMR) **11**: 63-69.

Jacoby, J., G. J. Szybillo, et al. (1977). "Information Acquisition Behavior in Brand Choice Situations." Journal of Consumer Research **3**: 209-216.

Jacques, F. o. M. (2007). "Even Commodities Have Customers." Harvard Business Review **85**: 110-119.

James, J. M. and R. Bolstein (1992). "Large Monetary Incentives and Their Effect on Mail Survey Response Rates." The Public Opinion Quarterly **56**(4): 442-453.

Jan, B., E. M. Steenkamp, et al. (1997). "The Increasing Power of Store Brands: Building Loyalty and Market Share." Long Range Planning **30**: 917-930.

Jarvis, C. B., S. B. Mackenzie, et al. (2003). "A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research." Journal of Consumer Research **30**: 199-218.

Jones, M. A. and J. Suh (2000). "Transaction-specific satisfaction and overall satisfaction: an empirical analysis." Journal of Services Marketing **14**: 147.

Jones, T. O. and W. E. Sasser Jr (1995). "Why Satisfied Customers Defect." Harvard Business Review **73**: 88-91.

Karray, S. and G. Zaccour (2006). "Could co-op advertising be a manufacturer's counterstrategy to store brands?" Journal of Business Research **59**: 1008-1015.

Keller, K. L. (1998). Strategic brand management: building, measuring, and managing brand equity, Prentice Hall.

Kent, R. (2007). Marketing Research: Approches, Methods and Application in Europe, Thomson.

Kent, T. (2003). "2D23D: Management and design perspectives on retail branding." International Journal of Retail & Distribution Management **31**(3): 131.

Kerlinger, F. N. (1986). Foundations of Behavioral Research. 3rd ed., New York, Rinehart and Winston Inc.

Kotler, P. and K. L. Keller (2006). Marketing Management, Prentice Hall, 12th ed.

Kristensen, K., H. J. Juhl, et al. (2001). "Customer satisfaction: some results for European Retailing." Total Quality Management **12**: 890-897.

Krosnick, J. A. (1999). "Survey research." Annual Review of Psychology **50**(1): 537.

Kumar, N. (1997). "The Revolution in Retailing: from Market Driven to Market Driving." Long Range Planning **30**: 830-835.

Kumar, N. and J.-B. E. M. Steenkamp (2007). Private Label Strategy: how to meet the Store brand challenge Boston, MA: Harvard Business School Press.

Laaksonen, H. and J. Reynolds (1994). "Own brands in food retailing across Eutope." The Journal of Brand Management **2**(1): 37-46.

Laaksonen, M. (1993). "Retail Ptronage Dynamics: Learning About Daily Shopping Behavior in Contexts of Changing Retail Structures." Journal of Business Research **28**(1/2): 3-174.

Lamey, L., B. Deleersnyder, et al. (2007). "How Business Cycles Contribute to Private-Label Success: Evidence from the United States and Europe." Journal of Marketing **71**: 1-15.

Law, K. S., W. Chi-Sum, et al. (1998). TOWARD A TAXONOMY OF MULTIDIMENSIONAL CONSTRUCTS. Academy of Management Review, Academy of Management. **23:** 741-755.

Lee, A. S. (1991). "INTEGRATING POSITIVIST AND INTERPRETIVE APPROACHES TO ORGANIZATIONAL RESEARCH." Organization Science **2**: 342-365.

Levy, S. J. (1978). Market Place Behavior, NY: AMACOM.

Levy, S. J. and I. O. Glick (1973). Imagery and Symbolism. Marketing Manager's Handbook, Stewart H. Britt, Editor (Chicago, II: Dartnell**:** 961-69.

Lincoln, K. and L. Thomassen (2007). How to Succed at Retail, Kogan Page.

Lindquist, J. D. (1974). "Meaning of Image." Journal of Retailing **50**(4): 29.

Livesey, F. and P. Lennon (1978). "Factors Affecting Consumers' Choice between Manufacturer Brands and Retailer Own Labels." European Journal of Marketing **12**: 158.

Magi, A. W. (2003). "Share of wallet in retailing: the effects of customer satisfaction, loyalty cards and shopper characteristics." Journal of Retailing **79**: 97-106.

Malhotra, K. N. (2006). Questionnaire Design and Scale Development. The Handbook of Marketing Research: Uses, Misuses, and Future Advances. R. Grover and M. Vriens, Sage Publications.

Mangold, W. G. and F. Miller (1999). "Word-of-mouth communication in the service marketplace." Journal of Services Marketing **13**(1): 73.

Marcoulides, G. A., W. W. Chin, et al. (2009). "A CRITICAL LOOK AT PARTIAL LEAST SQUARES MODELING." MIS Quarterly **33**(1): 171-175.

Martineau, P. (1958). "The Personality of the Retail Store." Harvard Business Review **36**(1): 47-55.

Mautz, R. K. and F. L. Neumann (1970). "The effective corporate audit committee." Harvard Business Review **48**: 57-65.

May, T. (2001). Social Research: issues, methods and process, Open University Press.

Mayer, R. C., J. H. Davis, et al. (1995). "AN INTEGRATIVE MODEL OF ORGANIZATIONAL TRUST." Academy of Management Review **20**: 709-734.

McConnell, J. D. (1968). "The Development of Brand Loyalty: An Experimental Study." Journal of Marketing Research (JMR) **5**: 13-19.

McGoldrick, P. J. (1984). "Grocery Generics--An Extension of the Private Label Concept." European Journal of Marketing **18**(1): 5.

McGoldrick, P. J. (2002). Retail Marketing. London, McGraw Hill.

Mieres, C. G. l., A. M. D. Martin, et al. (2006). "Influence of perceived risk on store brand proneness." International Journal of Retail & Distribution Management **34**: 761-772.

Milewicz, J. and P. Herbig (1994). "Evaluating the Brand Extension Decision Using a Model of Reputation Building." Journal of Product & Brand Management **3**: 39.

Miquel, S., E. M. Caplliure, et al. (2002). "The effect of personal involvement on the decision to buy store brands." Journal of Product & Brand Management **11**(1): 6.

Miranda, M. J., L. Konya, et al. (2005). "Shopper's satisfaction levels are not the only key to store loyalty." Marketing Intelligence & Planning **23**(2): 220-232.

Mitchell, V.-W. and R. H. Kiral (1998). "Primary and secondary store-loyal customer perceptions of grocery retailers." British Food Journal **100**(7): 312-319.

Mittal, V. and W. A. Kamakura (2001). "Satisfaction, Repurchase Intent, and Repurchase Behavior: Investigating the Moderating Effect of Customer Characteristics." Journal of Marketing Research (JMR) **38**: 131-142.

Moorman, C., R. Deshpande, et al. (1993). "Factors Affecting Trust in Market Research Relationships." Journal of Marketing **57**: 81-101.

Moorman, C., G. Zaltman, et al. (1992). "Relationships Between Providers and Users of Market Research: The Dynamics of Trust Within and Between Organizations." Journal of Marketing Research (JMR) **29**: 314-328.

Morgan, R. M. and S. D. Hunt (1994). "The Commitment-Trust Theory of Relationship Marketing." Journal of Marketing **58**: 20.

Morris, D. (1979). "The Strategy of Own Brands." European Journal of Marketing **13**(2): 59-78.

Morwitz, V. G. and D. Schmittlein (1992). "Using Segmentation to Improve Sales Forecasts Based on Purchase Intent: Which "Intenders" Actually Buy?" Journal of Marketing Research (JMR) **29**: 391-405.

Moser, C. and G. Kalton (1972). Survey Methods in Social Investigation, 2nd. ed., New York: Basic Books.

Murray, K. B. (1991). "A test of services marketing theory: Consumer information acquisition activities." Journal of Marketing **55**: 10.

Myers, H. and N. Alexander (2007). "The role of retail internationalisation in the establishment of a European retail structure." International Journal of Retail & Distribution Management **35**: 6-19.

Nandan, S. and R. Dickinson (1994). "Private Brands." Journal of Consumer Marketing **11**(4): 18-28.

Nielsen. (2011). "The Rise of the Value-Conscious Shopper." A Nielsen Global Private Label Report March 2011, from http://au.nielsen.com/site/documents/PrivateLabelGlobalReportMar2011.pdf.

Oliver, R. L. (1980). "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions." Journal of Marketing Research (JMR) **17**: 460-469.

Oliver, R. L. (1981). "Measurement and Evaluation of Satisfaction Processes in Retail Settings." Journal of Retailing **57**: 25.

Oliver, R. L. (1999). "Whence Consumer Loyalty?" Journal of Marketing **63**: 33-44.

Oliver, R. L. and W. S. DeSarbo (1988). "Response Determinants in Satisfaction Judgments." Journal of Consumer Research **14**: 495-507.

Olsen, S. O. (2002). "Comparative Evaluation and the Relationship Between Quality, Satisfaction, and Repurchase Loyalty." Journal of the Academy of Marketing Science **30**: 240-249.

Omar, O. E. (1994). "Comparative Product Testing for Own-label Marketing." International Journal of Retail & Distribution Management **22**: 12.

Osselaer, S. M. J. A. and J. W. Alba (2000). Consumer Learning and Brand Equity. Journal of Consumer Research, Journal of Consumer Research, Inc.**:** 1-16.

Pappu, R. and P. Quester (2006). "Does customer satisfaction lead to improved brand equity? An empirical examination of two categories of retail brands." Journal of Product & Brand Management **15**: 4-14.

Parasuraman, A., V. A. Zeithaml, et al. (1988). "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality." Journal of Retailing **64**(1): 5-6.

Peterson, R. A. and W. R. Wilson (1992). "Measuring customer satisfaction: Fact and artifact." Journal of the Academy of Marketing Science **20**: 61.

Petter, S., D. Straub, et al. (2007). "SPECIFYING FORMATIVE CONSTRUCTS IN INFORMATION SYSTEMS RESEARCH." MIS Quarterly **31**: 623-656.

Philips, D. C. and N. C. Burbules (2000). Postpositivism and educational research, Lanham, MD: Rowman & Littlefield.

Pitta, D. A. and L. P. Katsanis (1995). "Understanding brand equity for successful brand extension." Journal of Consumer Marketing **12**(4): 51.

Prendergast, G. P. and N. E. Marr (1997). "Generic products: who buys them and how do they perform relative to each other?" European Journal of Marketing **31**(1/2): 94-109.

Pride, W. M. and O. C. Ferrell (2003). Marketing Concepts and Strategies. Boston, Houghton Mifflin.

Quelch, J. A. and D. Harding (1996). "Brands Versus Private Labels: Fighting to Win." Harvard Business Review **74**: 99-109.

Raju, J. S., R. Sethuraman, et al. (1995). "The Introduction and Performance of Store Brands." Management Science **41**: 957-978.

Ranaweera, C. and J. Prabhu (2003). "On the relative importance of customer satisfaction and trust as determinants of customer retention and positive word of mouth." Journal of Targeting, Measurement & Analysis for Marketing **12**: 82-90.

Reicheld, F. F. (1996). "The Satisfaction Trap." Harvard Business Review **74**(2): 58-59.

Reichheld, F. F. and W. E. Sasser Jr (1990). "Zero defections: Quality comes to services." Harvard Business Review **68**: 105-111.

Remenyi, W., Brian Williams , D. Remenyi , ETC. , Arthur Money and Ethne Swartz (1998). "Doing Research in Business and Management: An Introduction to Process and method Synopsis", Sage Publications.

Richardson, P., K. A. Jain, et al. (1996a). "The influence of store aesthetics on evaluation of private label brands." Journal of Product & Brand Management **5**(1).

Richardson, P. S. (1997). "Are store brands perceived to be just another brand?" Journal of Product & Brand Management **6**: 388.

Richardson, P. S., A. S. Dick, et al. (1994). Extrinsic and intrinsic cue effects on perceptions of store brand quality. Journal of Marketing, American Marketing Association. **58:** 28.

Richardson, P. S., A. K. Jain, et al. (1996b). "Household Store Brand Proneness: A Framework." Journal of Retailing **72**(2): 159-185.

Richins, M. (1983). "Negative word-of-mouth by dissatisfied consumers: a pilot study." Journa of Marketing **47**: Winter, pp.66-78.

Rindfleisch, A., A. J. Malter, et al. (2008). Cross-Sectional Versus Longitudinal Survey Research: Concepts, Findings, and Guidelines. Journal of Marketing Research (JMR), American Marketing Association. **45:** 261-279.

Robson, C. (1993). Real World Research: A Resource for Social Scientists and Practitioner-Researchers, Blackwell: Oxford.

Rocereto, J. F. and J. B. Mosca (2012). "The Differential Roles of Product Brand Image and Store Brand Image in Retail Loyalty: A Self-Concept Image Congruity Perspective " Journal of Business & Economics Research **10**(2): 77-96.

Rust, R. T. and R. L. Oliver (1994). Service Quality: Insights and Managerial Implications from the Frontier, New York: Sage Publications, Inc.

Rust, R. T. and A. J. Zahorik (1993). "Customer Satisfaction, Customer Retention, and Market Share." Journal of Retailing **69**: 193.

Salzer-Morling, M. and L. Strannegard (2004). "Silence of the brands." European Journal of Marketing **38**: 224-238.

Sayman, S., S. J. Hoch, et al. (2002). "Positioning of Store Brands." Marketing Science **21**: 378-397.

Schutte, T. F. (1969). "The Semantics of Branding." Journal of Marketing **33**: 5-6.

Selnes, F. (1993). "An Examination of the Effect of Product Performance on Brand Reputation, Satisfaction and Loyalty." European Journal of Marketing **27**(9): 19-35.

Selnes, F. (1998). "Antecedents and consequences of trust and satisfaction in buyer-seller relationships." European Journal of Marketing **32**(3): 305-322.

Semeijn, J., A. C. R. Van Riel, et al. (2004). "Consumer evaluations of store brands: effects of store image and product attributes." Journal of Retailing and Consumer Services **11**(4): 247-258.

Sheinin, D. A. and J. Wagner (2003). "Pricing store brands across categories and retailers." Journal of Product & Brand Management **12**(4): 201-219.

Sheth, J. N., B. I. Newman, et al. (1991). "Why we buy what we buy: A theory of consumption values." Journal of Business Research **22**(2): 159-170.

Shin, D. and K. Elliott (1998). "ASSESSING THE IMPACT OF CUSTOMER SATISFACTION ON CUSTOMER RETENTION." Journal of Marketing Management (10711988) **8**: 95-102.

Shu-Ching, C. and P. G. Quester (2006). "Modeling store loyalty: perceived value in market orientation practice." Journal of Services Marketing **20**: 188-198.

Simmons, M. and B. Meredith (1984). "Own label profile and purpose." Journal of Marketing Research Society **26**(1): 3-27.

Singer, E., H. Hippler, et al. (1992). "Confidentiality assurances in surveys: reassurance or threat?" International Journal of Public Opinion Research **Autumn**: 256-268.

Singh, J. and D. Sirdeshmukh (2000). "Agency and Trust Mechanisms in Consumer Satisfaction and Loyalty Judgments." Journal of the Academy of Marketing Science **28**: 150.

Sinha, I. and R. Batra (1999). "The effect of consumer price consciousness on private label purchase." International Journal of Research in Marketing **16**(3): 237-251.

Sirdeshmukh, D., J. Singh, et al. (2002). "Consumer Trust, Value, and Loyalty in Relational Exchanges." Journal of Marketing **66**: 15-37.

Sirgy, M. J. (1985). "Using Self-Congruity and Ideal Congruity to Predict Purchase Motivation." Journal of Business Research **13**(3): 195-206.

Sirohi, N., E. W. McLaughlin, et al. (1998). "A model of consumer perceptions and store loyalty intentions for a supermarket retailer." Journal of Retailing **74**(2): 223-245.

Sivadas, E. and J. L. Baker-Prewitt (2000). "An examination of the relationship between service quality, customer satisfaction, and store loyalty." International Journal of Retail & Distribution Management **28**(2): 73.

Smith, T. M. F. (1983). "On the Validity of Inferences from Non-random Sample." Journal of the Royal Statistical Society. Series A (General) **146**(4): 394-403.

Solomon, M. R. and B. Buchanan (1991). "A role-theoretic approach to product symbolism: Mapping a consumption constellation." Journal of Business Research **22**(2): 95-109.

Spreng, R. A., S. B. MacKenzie, et al. (1996). "A Reexamination of the Determinants of Consumer Satisfaction." Journal of Marketing **60**: 15.

Spreng, R. A. and R. D. Mackoy (1996). "An Empirical Examination of a Model of Perceived Service Quality and Satisfaction." Journal of Retailing **72**(2): 201-214.

Stanton, J. L. and L. A. Tucci (1982). "The Measurement of Consumption: A Comparison of Surveys and Diaries." Journal of Marketing Research (JMR) **19**: 274-277.

Steenkamp, J.-B. E. M. and M. C. Dekimpe (1997). "The Increasing Power of Store Brands: Building Loyalty and Market Share." Long Range Planning **30**: 917-930.

Struebbe, J. M., J. B. Kernan, et al. (1986). "THE REFUSAL PROBLEM IN TELEPHONE SURVEYS." Journal of Advertising Research **26**(3): 29.

Sui-Hua, Y. (2007). "An Empirical Investigation on the Economic Consequences of Customer Satisfaction." Total Quality Management & Business Excellence **18**: 555-569.

Szymanski, D. M. and P. S. Busch (1987). "Identifying the Generics-Prone Consumer: A Meta-Analysis." Journal of Marketing Research (JMR) **24**: 425-431.

Szymanski, D. M. and D. H. Henard (2001). "Customer Satisfaction: A Meta-Analysis of the Empirical Evidence." Journal of the Academy of Marketing Science **29**: 16.

Temme, D., H. Kreis, et al. (2010). A Comparison of Currect PLS Path Modeling Software: Features, Easy-of-Use, and Performance. Handbook of Partial Least Squares. V. E. Vinzi, W. W. Chin, J. Henseler and H. Wang, Springer, Berlin.

Touche, D. (2004b) "Getting Your Fair Share: Seven strategies for survival in the grocery industry."

Tyebjee, T. T. (1979). "TELEPHONE SURVEY METHODS: THE STATE OF THE ART." Journal of Marketing **43**: 68-78.

Varki, S. and M. Colgate (2001). "The Role of Price Perceptions in an Integrated Model of Behavioral Intentions." Journal of Service Research **3**(3): 232-240.

Veloutsou, C., E. Gioulistanis, et al. (2004). "Own labels choice criteria and perceived characteristics in Greece and Scotland: factors influencing the willingness to buy." Journal of Product & Brand Management **13**: 228-241.

Vinzi, V. E., W. W. Chin, et al., Eds. (2010). Handbook of Partial Least Squares: Concepts, Methods and Applications, Springer.

Wahyuningsih and J. Tanamal (2008). "A STUDY ON CUSTOMER SATISFACTION ACROSS INFORMATION SEARCH BEHAVIOR TYPOLOGY." Gadjah Mada International Journal of Business **10**: 25-46.

Walton, L. W. (1997). "TELEPHONE SURVEY: ANSWERING THE SEVEN Rs TO LOGISTICS RESEARCH." Journal of Business Logistics **18**(1): 217-231.

Weber, R. (2004). "The Rhetoric of Positivism Versus Interpretivism: A Personal View." MIS Quarterly: 1-1.

Webster, J. F. E. (2000). "Understanding the Relationships Among Brands, Consumers, and Resellers." Journal of the Academy of Marketing Science **28**: 17.

Westlund, A. H., M. Kallstrom, et al. (2008). "SEM-based customer satisfaction measurement: On multicollinearity and robust PLS estimation." Total Quality Management & Business Excellence **19**: 855-869.

Wileman, A. and M. Jary (1998). Retail Power Plays: From Trading to Brand Leadership, New York University Press.

Wilkes, R. E. and H. Valencia (1985). "A Note on Generic Purchaser Generalizations and Subcultural Variations." Journal of Marketing **49**: 114-120.

Wind, Y. and D. Lerner (1979). "On the Measurement of Purchase Data: Surveys Versus Purchase Diaries." Journal of Marketing Research (JMR) **16**((February)): 39-47.

Wood, L. (2000). "Brands and brand equity: definition and management." Management Decision **38**: 662.

Yao, M. (1979). Generic Products are Winning Noticeable Shares of Market from National Brands, Private Labels. Wall Street Journal.

Yeung, M. C. H. and C. T. Ennew (2000). "From customer satisfaction to profitability." Journal of Strategic Marketing **8**: 313-326.

Yi, Y. (1990). A Critical Review of Customer Satisfation, Review of Marketing, Chicago: American Marketing Association.

Zbytnieweske, J.-A. and W. H. Heller (1979). "Risk shopper, poor shopper, they're all trying Generics." Progressive Grocer **58**: 92-106.

Zeithaml, V. A. (1988). "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence." Journal of Marketing **52**: 2-22.

Zeithaml, V. A., L. L. Berry, et al. (1996). "The Behavioral Consequences of Service Quality." Journal of Marketing **60**: 31-46.

APPENDICES

Appendix A

Research Environment

Introduction

The objective of Appendix A is to provide with relevant background information on the Hellenic environment as a setting for this study. As we mentioned previously, the data were collected (in late 2007) well before the current crisis in the Greek economy. Therefore, the information for the economic environment, the grocery retailers and the store brands is for 2007 and 2008.

An Overview of the General Environment

Greece is located in southeastern Europe (see the map below). The Greek mainland occupies the southern most tip of the Balkan Peninsula while it has more than 2.000 islands (https://www.cia.gov/library/publications/the-world-factbook/geos/gr.html). Much of the population of Greece is concentrated in a few major urban areas, with approximately one third of the country's population living in Athens.

Greece has been member of the EU since 1981 (EC at that time) and became the 12th member of the Euro zone in 2001(EMU). The country managed to achieve a fast-growing economy from 2001 to 2007 with GDP growth rates higher than the EU average and rapidly declining inflation rates due to a program of economic convergence with European standards. However, it was severely hit by the global financial crisis of 2007 - 2009. Greece has a predominately service economy, which accounts for approximately 80% of GDP (Datamonitor, 2012).

Source: http://www.lonelyplanet.com/maps/europe/greece/. Accessed: June 21, 2012

Selected Macroeconomic Indicators for Greece	
Capital	Athens
Area	131,957 sq km
Population (2008)	11,237,094
GDP (current US$, 2008)	341.2 billion
GDP per capita (current US$, 2008)	30.36
Distribution of family income – Gini index (2000)	34.3
GNI per capita, PPP (current international US$)	28,600
Population in urban areas	60%
No. of Households (‘000, 2008)	3,957.8
Telephone lines	5,253,695

Source: World Bank, Euromonitor

An Overview of the Grocery Retail Industry

Overall retailing in Greece is characterized by great fragmentation, with a large number of independent operators. However, retailing is expected to become more consolidated as chained operations are gaining a bigger share of the market. Store-based retailing dominates the market with grocery retailers having 48% of the total retail spending. Grocery retailers are leading the market with five companies (Carrefour-Marinopoulos, AB Vassilopoulos, Sklavenitis, Lidl and Veropoulos) having the top value shares in the store-based retailing.

	2006	2007	2008
Store-based Retailing	52,118.2	54,893.7	55,261.4
Grocery Retailers	24,970.3	26,220.4	26,763.4
Non-Grocery Retailers	27,147.9	28,673.3	28,498.0
Non-Store Retailing	443.6	492.5	538.7
Retailing	52,561.7	55,386.2	55,800.0
% Change		5.4%	0.7%

Source: Retailing in Greece, Euromonitor International January 2012

Supermarkets are classified into two large categories: (a) the chains, with three or more outlets, and (b) the independent stores with up to two outlets. As the table below indicates 34% of the total number of supermarkets are located in Athens and Thessaloniki, the two large metropolitan areas with approximately 46% of the population. In addition, almost 47% of the chain supermarkets are located in these two large metropolitan areas.

Type of supermarkets	2007	2008	$ Ch	2008 Athens	2008 Thessaloniki
Chain's supermarkets	2,518	2,544	1.03	888	297
Independent supermarkets	1,522	1,652	8.54	180	70
Total supermarkets	4,040	4,196	3.86	1,068	367

Source: PANORAMA OF THE GREEK SUPERMARKETS, No 13, Autumn 2009

Out of the total number of chain supermarkets almost 80% belong to large chains with 20 stores and above.

Number of Stores	2008	
	Number of Chains	Number of Stores
3 – 5	41	157
6 – 10	21	157
11 – 15	11	141
16 – 20	5	84
20 and +	18 (19% of total)	2,005 (79% of total)
Total	**96**	**2,544**

Source: PANORAMA OF THE GREEK SUPERMARKETS, No 13, Autumn 2009

Information on the nine grocery retailers

We have focused our survey in the top nine grocery retailers in Greece. The table below indicates that these retailers represent approximately 70% (total sales 7,184,696 out of the 10,238,521) of the total sales in the 74 companies. Please note that information for Lidl is not available since Lidl operates in the form of a partnership and does not publish its income statement and balance sheet.

Company	No. of Stores	2008 (in 000's Euro)	
		Turnover	NPBT
Alfa-Beta Vasilopoulos SA	157	1,337,074	40,983
Atlantik S/M SA	172	614,365	(4,201)
Veropoulos Bros SA	218	922,926	4,319
Carrefour-Marinopoulos SA	252	1,994,600	26,162
LIDL	Not available		
Diamanitis Masoutis SA	185 (182 SM & 3 C&C)	576,420	17,923
Metro SA	75 (45 SM & 30 C&C)	650,658	24732
I. & S.Sklavenitis SA	70	1,088,653	15,967
Total: 74 companies		10,238,521	170,057

Source: PANORAMA OF THE GREEK SUPERMARKETS, No 13, Autumn 2009

Appendix B

Survey Questionnaire in English

Good morning / Good afternoon. My name is ..... and I work for GLOBAL LINK, an independent marketing research company. We conduct a research related with super market purchases. Can I have a few minutes of your time?

	112
Responded	1
Line busy	2
No response	3
Personal answering machince	4
Company answering machine	5
The number has changed	6
The number doesn't exist	7
Fax	8

A. I would like you to tell me if you or any other member of your family works in any of the following companies? READ:

	113	
Market Research	1	
Marketing	2	**CLOSE INTERVIEW**
Advertising	3	
Super Market	4	
None of the above	5	➔ **Q. B**

B. Are you personally responsible for the household purchases made from the super market?

	114	
Yes	1	➔ **Q. D**
No	2	➔ **Q. C**

C. Can I please talk with the person who is responsible for the super market purchases of your household?

	115	
Response / is coming to the phone	1	➔ **Q. D**
Is in the office/ busy	2	
Refusal	3	**CLOSE INTERVIEW**
Not purchasing from a supermarket	4	

D. In which age group do you belong?

	107	
Under 18 years old	1	➔ **CLOSE INTERVIEW**
18 – 24	2	
25 – 34	3	
35 – 44	4	
45 – 54	5	
55 - 64	6	
65+ years old	7	➔ **CLOSE INTERVIEW**

E. GENDER

	108
Male	1
Female	2

E. In which area do you live?

	116	
Athens	1	➔ Quotas
Salonica	2	➔ Quotas

Q. 1 From which super market do you usually do your shopping? Namely you make **most of your purchases**, that you spend the most? **ONE ANSWER**

AV VASILOPOULOS (Delhaize Group)	1	
ATLANTIK	2	
SPAR VEROPOULOS	3	
CARREFOUR	4	*Q. 2*
LIDL	5	
CHAMPION MARINOPOULOS	6	
GRAND MASOUTIS	7	
MY MARKET	8	
ΣKLAVENITIS	9	
Other. Explain	0	
None	X	**CLOSE INTERVIEW**
Don't Know/ Don't Remember	Y	

Q. 2 From which super market(s) do you **occasionally** do your shopping? Namely you shop from time to time? **MORE THAN ONE RESPONSE**

AV VASILOPOULOS (Delhaize Group)	1
ARVANITIDIS	2
ATLANITK	3
SPAR VEROPOULOS	4
GALAXIAS	5
CARREFOUR	6
DIA	7
DOUKAS	8
LIDL	9
CHAMPION MARINOPOULOS	10
GRAND MASOUTIS	11
MY MARKET	12
PANEBORIKI	13
PEIRAIKO	14
ΣKLAVENITIS	15
Mini market	16
Traditional Food store	17
Psilika / Kiosk	18
Other. Explain	19
None	20
Don't Know/ Don't Remember (DK/DR)	21

ASK FOR EACH STORE THAT SHOPS (Q. 1, 2)

Q. 3a) How often do you shop in the super market that you make **most of your purchases?** (from Q. 1) **READ**

Q. 3b) And how often in the super market that you **occasionally** shop? (from Q. 2) **READ**

READ:	Most of purchases	Occasional Purchases
Every Day	1	1
2 – 3 times a week	2	2
Once a week	3	3
Every 15 days / every 2 weeks	4	4
Once a month	5	5
Every 2 months	6	6
Every 3 months / 4 times a year	7	7
2 times a year	8	8
Once a year	9	9
Less than once a year	10	10

Now let's talk for the supermarket that you make **most of your purchases.**

Q. 4 I would like you to tell me how satisfied you are with the supermarket that you usually shop on the following issues that are related **with its space**, using the following scale. **READ THE SCALE FOR EACH**

	VERY SATIS.	**SATISFIED**	**NOT SO SATIS.**	**NOT AT ALL**	**DOESN'T HAVE**	**DK/DR**
The cleanliness of the space	4	3	2	1	6	5
The signs on the aisles of the store	4	3	2	1	6	5
The size of the store	4	3	2	1	6	5
The music inside the store	4	3	2	1	6	5
The distance from the house/ work	4	3	2	1	6	5
The parking	4	3	2	1	6	5

Q. 5 How satisfied you are with the variety of product categories of the super market that you make most of your purchases? Using the following scale. **READ THE SCALE**

VERY SATISFIED	4
SATISFIED	3
NOT SO SATISFIED	2
NOT AT ALL SATISFIED	1
DK /DR (don't read this)	5

Q. 6 And how satisfied you are with the number of different brands per product category, that are offered by the super market that you make most of your purchases? Using the following scale. **READ THE SCALE**

VERY SATISFIED	4
SATISFIED	3
NOT SO SATISFIED	2
NOT AT ALL SATISFIED	1
DK /DR (don't read this)	5

Q. 7 For the supermarket that you make **most of your purchases**, I would like you to tell me if you buy **the super market brands.** From which of the following categories do you buy? **READ**

I do not buy the super market brands	1
Luncheon Meat/ Cheese	2
Soft Drinks	3
Detergents	4
Dairy Products	5
Wine	6
Beer	7
Shampoo & Bath foam	8
Food Products	9
Paper products (napkins, etc.)	10
Juices	11
Other category that is purchasing super market brands, Specify ……..	12

Q. 8 Regardless of whether you buy super market brands or not, I would like you to tell me how much to do **trust** them per product category? Using the following scale. **READ EACH CATEGORY. READ THE SCALE**

	TRUST A LOT	**TRUST SOMEHOW**	**TRUST A LITTLE**	**DO NOT TRUST AT ALL**	**DK/DR**
Luncheon Meat/ Cheese	4	3	2	1	5
Soft Drinks	4	3	2	1	5
Detergents	4	3	2	1	5
Dairy Products	4	3	2	1	5
Wine	4	3	2	1	5
Beer	4	3	2	1	5
Shampoo & Bath foam	4	3	2	1	5
Food Products	4	3	2	1	5
Paper products (napkins, etc.)	4	3	2	1	5
Juices	4	3	2	1	5

Now let's talk for issues related with **the Service** in your super market that you make most of your purchases.

Q.9 I would like you to tell me how satisfied you are with your super market on the following issues related with the service using the following scale? **READ THE SCALE FOR EACH**

	VERY SATIS.	**SATISFIED**	**NOT SO SATIS**	**NOT AT ALL**	**DK/DR**
Available employees for help/service	4	3	2	1	5
The prices are visible on the shelves	4	3	2	1	5
The prices are the same on the shelves and at the cashier	4	3	2	1	5

Q. 10. Regarding out of stocks, I would like you to tell me, do you usually find the products you want: always, most of the times, often there are out of stock?

I always find the products I want	3
I find them most of the times	2
I often encounter out of stock	1

Q. 11 Finally regarding expired products on the shelves, I would like you to tell me, do you usually find products on the shelves that have expired? Often, Rarely or Never?

I Often find products that have expired	1
I Rarely find products that have expired	2
I Never find products that have expired	3

Q. 12 Do you usually pay with a credit card or with cash?

With a Credit Card	1
With Cash	2
DK/DR	3

Q. 13 Are there any products or services that you don't find in your main super market and that you would like to find them? What?

Q. 14 Finally, the supermarket that you make most of your purchases …**READ**

I will definitely recommend it to my friends	4
May be I will recommend it to my friends	3
May be I will not recommend it to my friends	2
I will definitely not recommend it to my friends	1
DK/DR (don't read this option)	5

DEMOGRAPHICS

Q. 15 Family status:

Married	1
Single	2
Divorced or Widow	3

Q. 16 Are you the main source of income for your household?

Yes	1
No	2

Q. 17 What is your occupation? And what is the occupation of the other member in your family? **READ THE LIST**

	Respondent	Other member
Self Employed		
Farmer (up to 50 acres or 100 animals)	1	1
Farmer (with 50+ acres or 100+ animals)	2	2
Self employed no employees	3	3
Self employed with 1-2 employees	4	4
Self employed with 3-5 employees	5	5
Self employed with 6-10 employees	6	6
Self employed with 11-49 employees	7	7
Self employed with 50+ employees	8	8
Self employed Scientist / Specialist	9	9
Employed		
Scientist/Specialist Employee	10	10
General manager with up to 5 employees	11	11
General manager with 6 –10 employees	12	12
General manager with 11 + employees	13	13
Supervisor with up to 5 employees	14	14
Supervisor with 6 + employees	15	15
Office staff	16	16
Staff for external affairs	17	17
Manual work with specialization	18	18
Manual work no specialization	19	19
Student	20	20
Housewife / Retired / Income from investment	21	21
Unemployed	22	22
Refusal/ Did not answer about the working status	23	23

Q. 18 Education

	Respondent	Other member
Has not attended school or has attended up to the second grade of Elementary school (No Education or almost none)	1	1
From the 3η grade of Elementary school up to the 3η High school grade (Low Education)	2	2
From the 1η up to the 3η Lykio or from 4η up to the 6η grade of the old High school (Middle Education)	3	3
Graduates of Technical or other private schools (High Education)	4	4
University Graduates with an Undergraduate or a Postgraduate Degree (Higher Education)	5	5

I certify that this interview is true and was conducted according to the principles of GLOBAL LINK and the code of ethics of ESOMAR and the Law N2472/97

Interviewer Name

169	170	171

Signature

Date		Month		Year	
172	173	174	175	176	177

Appendix C

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Customer Satisfaction - Environment										
Cleanliness	910	1,00	4,00	3,3989	,60453	,365	-,550	,081	-,118	,162
Music	480	1,00	4,00	2,8771	,82466	,680	-,800	,111	,410	,222
Signs on aisles	834	1,00	4,00	3,1631	,70483	,497	-,715	,085	,816	,169
Playground	67	1,00	4,00	2,8806	1,16153	1,349	-,598	,293	-1,120	,578
Customer Satisfaction - Delivery										
Personnel	899	1,00	4,00	3,1435	,84848	,720	-,727	,082	-,187	,163
Prices on shelves	898	1,00	4,00	3,3085	,72812	,530	-,844	,082	,364	,163
Prices shelves & cashier	742	1,00	4,00	3,2466	,81473	,664	-,961	,090	,439	,179
Shortage	905	1,00	3,00	2,4166	,71330	,509	-,804	,081	-,646	,162
Expired prod.	905	1,00	3,00	2,7613	,49382	,244	-1,969	,081	3,086	,162
Customer Satisfaction - Product										
Size of store	910	1,00	4,00	3,0956	,70100	,491	-,441	,081	,086	,162
Location	910	1,00	4,00	3,2088	,79071	,625	-,630	,081	-,434	,162
Parking	523	1,00	4,00	3,0440	,95290	,908	-,795	,107	-,271	,213
Width	911	1,00	4,00	3,1954	,67549	,456	-,451	,081	-,034	,162
Depth	896	1,00	4,00	3,1183	,69593	,484	-,363	,082	-,223	,163
WOM										
Recommendation	905	1,00	5,00	1,6950	,90587	,821	1,650	,081	3,006	,162

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Trust in Food SBs										
Lunch. Meat/Ch.	768	1,00	4,00	1,9245	1,04627	1,095	,603	,088	-1,074	,176
Soft Drinks	754	1,00	4,00	1,9867	1,06861	1,142	,511	,089	-1,193	,178
Dairy products	748	1,00	4,00	1,8904	1,03810	1,078	,631	,089	-1,071	,179
Wine	713	1,00	4,00	1,8948	1,05542	1,114	,642	,092	-1,079	,183
Beer	714	1,00	4,00	1,9356	1,05064	1,104	,566	,091	-1,143	,183
Food prod.	804	1,00	4,00	2,2649	1,05193	1,107	,028	,086	-1,364	,172
Juices	765	1,00	4,00	2,0118	1,08349	1,174	,466	,088	-1,267	,177
Trust in Non-Food SBs										
Detergents	791	1,00	4,00	2,2832	1,10841	1,229	,055	,087	-1,448	,174
Shampoo & BF	752	1,00	4,00	2,0066	1,07196	1,149	,462	,089	-1,256	,178
Paper prod.	811	1,00	4,00	2,5869	1,06494	1,134	-,354	,086	-1,141	,171

Appendix D

Multicollinearity Tests

VIF Calculation: Service Environment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	VIF
1	,376[a]	,141	,138	,56185	1,164772
2	,416[a]	,173	,170	,67751	1,20973
3	,361[a]	,131	,127	,77820	1,150182

Model 1: Cleanliness, Model 2: Signage, Model 3: Music

VIF Calculation: Service Delivery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	VIF
1	,473[a]	,224	,220	,75131	1,288694
2	,637[a]	,406	,402	,56358	1,682285
3	,556[a]	,309	,306	,68084	1,448087
4	,323[a]	,104	,099	,67700	1,1161
5	,310[a]	,096	,091	,47017	1,105954

Model 1: Employees, Model 2: Prices on shelves, Model 3: Expired products
Model 4: Shortage, Model 5: Prices on shelves & cashier

VIF Calculation: Service Product

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	VIF
1	,478[a]	,229	,223	,58614	1,296737
2	,163[a]	,026	,019	,77451	1,027167
3	,397[a]	,157	,151	,88476	1,186936
4	,767[a]	,589	,585	,41207	2,430839
5	,762[a]	,581	,577	,44172	2,385538

Model 1: Size, Model 2: Location, Model 3: Parking, Model 4: Width, Model 5: Depth

VIF Calculation: Trust to food SB

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	VIF
1	,792[a]	,628	,624	,60516	2,685461
2	,864[a]	,747	,745	,51584	3,951669
3	,832[a]	,693	,690	,55469	3,255354
4	,900[a]	,810	,808	,44301	5,267784
5	,908[a]	,825	,823	,42376	5,707753
6	,770[a]	,593	,589	,65659	2,458631
7	,810[a]	,656	,653	,60969	2,906435

Model 1: Trust on Luncheon Meat, Model 2: Soft Drinks, Model 3: Dairy,
Model 4: Wine, Model 5: Beer, Model 6: Other food prodcuts, Model 7: Juices

VIF Calculation: Trust to non-food SB

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	VIF
1	,786[a]	,618	,617	,67608	2,619998
2	,731[a]	,535	,533	,73282	2,148744
3	,705[a]	,497	,495	,76534	1,987653

Model 1: Detergents, Model 2: Shampoo & BF, Model 3: Paper products

Appendix E

Measurement Model Results

Measurement model results (PLS): outer weights and significance

	TOTAL (all 9 retailers)		AB		CARREFOUR		SKLAVENITIS		LIDL	
VARIABLES	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT
CLEANLINESS	1,178	11,220	1.701	2.527	1.004	1.695	2.184	2.736	1.403	2.255
MUSIC	0,133	4,570	-0.093	0.657	0.387	1.490	-0.271	0.707	0.154	0.584
SIGNAGE	0,311	5,720	0.053	0.152	0.182	1.188	-0.014	0.057	0.160	0.999
ENVIRONMENT	0.336	3.707	0.555	2.100	0.407	1.298	0.270	1.136	0.332	1.289
EMPLOYEES	0,384	4,518	0.428	1.442	0.443	1.364	0.230	0.630	0.356	1.436
EXPIRED	0,560	6,116	0.087	0.265	0.658	1.569	1.345	3.084	0.260	0.795
PRICES 1*	0,545	5,728	0.452	1.024	0.475	1.236	0.197	0.406	1.228	2.471
PRICES 2**	0,167	4,581	0.140	1.194	0.113	0.830	0.007	0.077	0.073	0.474
SHORTAGE	0,263	1,994	1.352	2.503	0.156	0.283	-0.563	0.791	-1.007	1.242
DELIVERY	0.454	4.108	0.481	1.961	0.135	0.437	0.912	2.937	-0.010	0.119
DEPTH	0,289	3,503	0.030	0.075	0.329	0.703	-0.046	0.099	0.240	0.520
LOCATION	0,160	2,117	0.169	0.473	0.129	0.360	-0.033	0.079	0.082	0.219
PARKING	0,053	1,659	0.042	0.306	0.114	0.824	-0.057	0.286	0.130	0.842
SIZE	0,382	4,172	0.125	0.296	0.323	0.737	0.750	1.357	0.913	1.807
WIDTH	0,953	9,356	1.395	2.229	0.939	1.217	1.216	1.347	0.769	1.621
PRODUCT	0.479	4.338	0.185	1.005	0.691	1.910	0.021	0.059	0.801	3.286

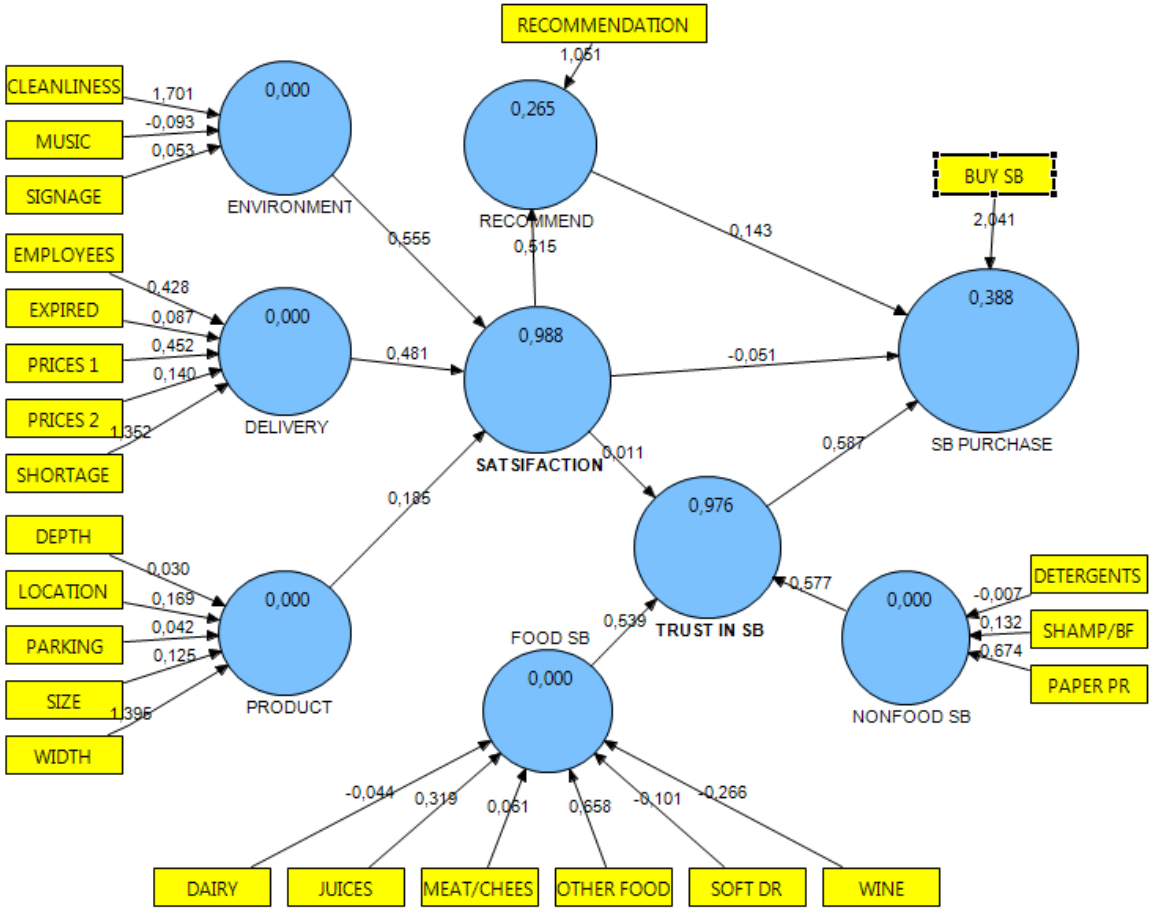
Measurement model results (PLS): outer weights and significance (continued)

	TOTAL (all 9 retailers)		AB		CARREFOUR		SKLAVENITIS		LIDL	
VARIABLES	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT	PATH WEIGHT	*t* - STAT
DAIRY	-0,047	1,347	-0.044	0.218	-0.002	0.012	-0.187	0.635	-0.276	1.502
JUICES	0,268	6,939	0.319	1.526	0.308	2.304	0.228	0.851	0.445	2.572
MEAT/CHEESE	0,063	1,689	0.061	0.337	0.065	0.475	-0.092	0.417	0.182	1.218
OTHER FOOD	0,362	8,423	0.658	3.770	0.278	1.821	0.638	2.338	0.135	0.846
SOFT DRINKS	0,147	3,670	-0.101	0.484	0.120	0.829	0.073	0.387	0.118	0.505
WINE	0,025	0,740	-0.266	1.278	0.056	0.424	-0.035	0.136	0.103	0.764
FOOD SB	0.370	2.773	0.539	2.834	0.354	1.084	0.973	3.914	0.167	0.803
DETERGENTS	0,125	2,934	-0.007	0.039	0.165	1.017	0.326	1.157	0.027	0.155
PAPER PROD	0,402	4,917	0.674	3.510	0.353	2.198	0.342	1.377	0.823	3.792
SHAMP/BF	0,249	7,097	0.132	0.661	0.261	1.647	0.065	0.197	0.314	2.140
NON-FOOD SB	0.687	6.373	0.577	3.092	0.701	2.181	0.049	0.204	0.903	4.284

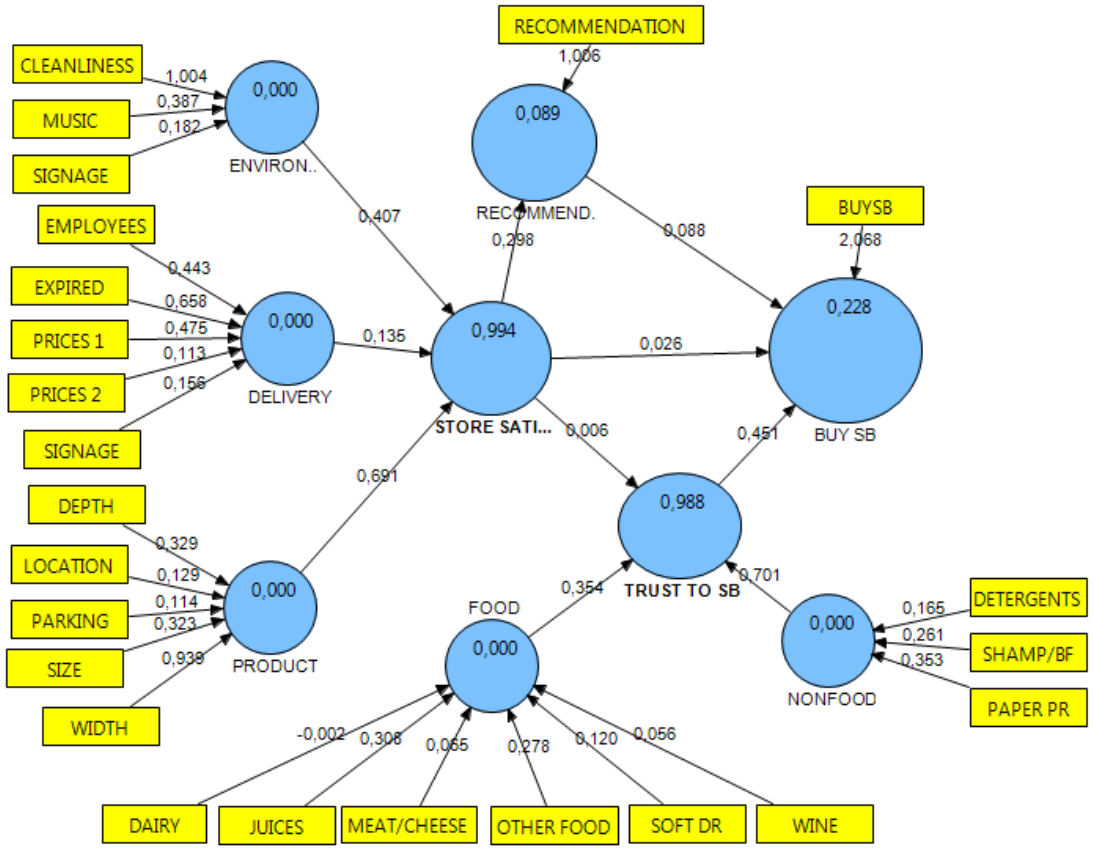
Appendix F

PLS Images by Retailer

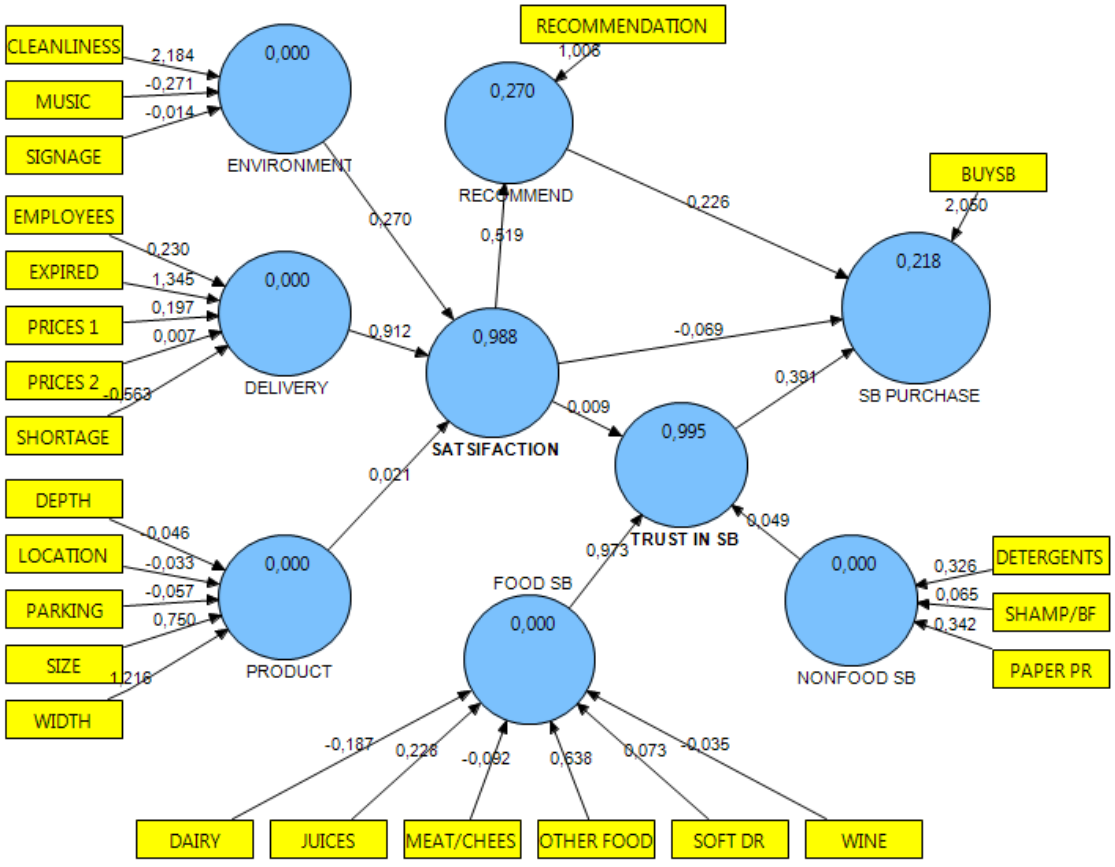
Model for AB Vasilopoulos



Model for Carrefour



Model for Sklavenitis



Model for Lidl